

## **Know How No 8** *guidance for research and evaluation in Fife*

### **Survey and Questionnaire Design**

#### **What this is about?**

Guidance on designing a survey or questionnaire.

#### **Who is it for?**

Anyone interested in using surveys or questionnaires as a research method.

#### **What do you need to know?**

##### **What is a survey?**

A survey is a common method of collecting information. The aim of a survey is to collect information that is accurate, reliable and valid.

##### **Why use surveys?**

Before doing a survey you should ask:

- What are the objectives of the survey?
- Are there specific questions to consider?
- Is it worthwhile doing a survey?
- Has a similar survey already been done?
- Are there other data sources that could be useful?
- Is a survey the best way of getting the information you need?
- Are there any ethical implications?

##### **Types of Surveys**

There are a number of different types of surveys and advantages and disadvantages to be weighed up in choosing the best method for your needs:

	Advantages	Disadvantages
Postal Surveys	<ul style="list-style-type: none"> <li>• Wide distribution</li> <li>• Low cost</li> <li>• No interviewer bias</li> </ul>	<ul style="list-style-type: none"> <li>• Low response rate</li> <li>• Not suitable for everybody</li> <li>• Questions need to be short and simple</li> </ul>
Face-to-face Interviews	<ul style="list-style-type: none"> <li>• Higher response rates</li> <li>• Good for asking closed and open questions</li> <li>• Can get fuller replies</li> </ul>	<ul style="list-style-type: none"> <li>• High cost</li> <li>• Time consuming</li> <li>• Interviewer bias</li> </ul>
Telephone Interviews	<ul style="list-style-type: none"> <li>• Low cost</li> <li>• Quick</li> <li>• Good response rate</li> </ul>	<ul style="list-style-type: none"> <li>• Can't reach everyone</li> <li>• Limit question categories</li> <li>• Not for sensitive questions</li> </ul>
Online Surveys	<ul style="list-style-type: none"> <li>• Low cost</li> <li>• Quick</li> <li>• High response rate</li> </ul>	<ul style="list-style-type: none"> <li>• Respondent bias</li> <li>• Not suitable for everybody</li> <li>• Questions need to be short and simple, clearly routed</li> </ul>

# Know How No 8- Survey & Questionnaire Design

## Introducing a survey

In introducing a survey by letter, telephone or face-to-face you need to mention:

- Who is doing the research?
- What the research is for?
- Importance of taking part
- Emphasise that responses will be treated in confidence

## Survey Design

It is important to get survey design right as it affects the number of responses, the data quality and also how data will be handled once returned.

In terms of structure and layout, surveys should be:

- Well spaced
- Questions should be numbered and not split across pages
- Instructions for each question should be clear
- Answers should allow you to skip a question that is not relevant. This is known as routing and should be kept to a minimum
- Answer categories should be boxes or numbers and presented in columns

## Some tips on question order

- First questions should be easy, short, interesting, and apply to everyone
- Questions on the same subject should be grouped together
- Sensitive questions should be placed late in the sequence
- Demographic questions such as age and gender should be placed at the end.

## How should questions be worded?

- Use every day language, not technical jargon
- Avoid asking multiple questions
- Use existing questions from other surveys or question banks. This is useful for standardising questions about age or ethnicity.
- Avoid leading questions
- Avoid questions that rely heavily on memory

## Types of question

There are two main types of question that can be used in a survey: open-ended or closed questions.

## Know How No 8- Survey & Questionnaire Design

### Open-ended question (Qualitative)

Respondents answer the questions in their own words. You should use this type of question when you want to explore the views of the respondents and are interested in the **quality** of the information that you get back.

Question type	Comment	Example
Completely open-ended	Exploratory question with a wide range of answers and therefore difficult to process	What do you think is the main issue for your local area?
Directed open-ended	More focused question	What town do you live in?
Restricted open-ended	Very focused and usually a number	How many children do you have?

### Closed questions (Quantitative)

Respondents choose from a list of options (can also include 'Other'). You should use this when you want to count the number of responses in different categories, in other words, the **quantity** of the information.

Question type	Comment	Example
Dichotomous	Yes/No response (can also include don't know)	Do you receive Child Benefit? Yes/No
Multiple-choice	Offers mutually exclusive and exhaustive list of choices – items should not overlap and should cover every possibility	<i>How far is your home from the nearest bus stop?</i> (please circle one number only) Less than 1 mile    1 1 – 5 miles        2 More than 5 miles   3
Rank order rating scale	Give scores out of a total	<i>For each mode of public transport, please give a score from 1 to 5 on its reliability (1 is very unreliable, 5 is very reliable)</i> Bus Train
Itemised rating scale	Used for attitudes or to describe something on an interval scale.	<i>How satisfied are you with the local bus service?</i> (please circle appropriate number) Very satisfied        1 Fairly satisfied      2 Neither                3 Fairly dissatisfied   4 Very dissatisfied    5

## Know How No 8- Survey & Questionnaire Design

### Analysing the Data

Before collecting the data, you need to think carefully about how you are going to analyse the data.

If you have asked closed questions you will be interested in **frequencies**, the number of times that respondents have answered a question in a particular way. You can also use **cross-tabulations** to see if, for example, males or females differ in the way that they answer a question.

If you have asked open questions this can be more difficult to analyse. Answers should be categorised systematically as you go through them. You are interested here in the variety of responses and what they tell you rather than the quantity of responses.

### Piloting Survey Questions

It is always a good idea to test out your survey questions in what is known as a 'pilot'. This allows you to check that the design of the survey works in practice. It will highlight any problems that people may have in filling in your questionnaire and give you information to help improve the design of the survey. Some questions to think about are:

- Do you get the information you want from the questions asked?
- Are questions clear? If you get a lot of missing results then this shows that they may not be as clear as you thought they were.
- Is the layout easy to follow?
- How long does the survey take to complete?
- Are there additional answers to precoded questions that could be added at this stage?

### Who is the target audience for your survey?

Identifying your target audience and selecting people to receive the survey is known as **sampling**. It is important to be aware of how representative (or not) your sample is for the group of people that you are interested in targeting, as this can affect the conclusions that you draw from it or how widely you can generalise the results. Generally, the larger the number of responses, the smaller the sampling error, and the more confident you can be in the accuracy of the results.

### To sum up

Surveys are a useful way of gathering information. However, you need to be clear about the objectives of the survey and make sure that you ask the right questions.

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