

# *Chapter 7*

## *Introduction to Questionnaire Designing*

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# Learning Objectives

- Describe the concept of designing a questionnaire
- Identify the different types of questions used in a questionnaire designing
- List the steps used in a questionnaire designing
- Discuss how to design an effective questionnaire



# The Concept of Questionnaire Designing

Questionnaires are often designed for collecting standardised information about behaviour, opinion, experience or preference of a group of respondents.

Some advantages of the questionnaire are:

**Economical:** The cost of creating and implementing questionnaires is very low.

**Wide coverage:** They are best to cover a large number of people.

**Rapidity:** They provide speedy results.

**Easy to implement:** They are easy to plan, create and administer.

**Less pressure on respondents:** Respondents can take their time to answer questions.

**Uniformity:** They do not allow much variation in recording responses.

**Greater validity:** Responses are interpreted without any bias or prejudice by the recorder.

**Anonymity:** They ensure anonymity of the respondents.



Some disadvantages of questionnaires are

**Limited response:** These are only applicable to an educated class; they cannot be applied to illiterate or semi-literate class.

**Lack of personal contact:** Even the best designed questionnaire may fail to elicit a suitable response due to lack of proper personal contact, which may result in failure to interpret questions or plain indifference.

**Poor response:** The questionnaires sent on email generally have very poor response rate.

**Incomplete entries:** Often respondents may leave out some crucial fields, making it difficult for the recorder to interpret their responses.



## An example for a good questionnaire

Thank you for taking the time to fill this questionnaire, you will remain anonymous, I just need a sample of an audience (in this case media students) to use as an example for a research project.

Are you	Male	Female	When was the last time you saw a film, what was it?
How old are you:	Years	Months	How many hours a day would you spend watching, reading or listening to:
Who do you live with at home (be specific please)			TV Radio Internet Print (magazines)
Do you have a part-time job? YES NO PAID VOLUNTARY If so, please describe what you do			Please list your top 3 TV programmes. 1. 2. 3.
Do you get pocket money/allowance? YES NO If Yes, how much do you get per week? What do you spend it on, generally?			List in order of preference (I being you most preferred, 5 being the least preferred) which genres (types of programmes) you watch: Sports Soap Sitcom Documentaries Film
Please list your top 3 favourite foods 1. 2. 3.			You are going to help organise some kind of music event for your age group: what types of music/bands would you want to play?

It depicts the characteristics of a good questionnaire because:

- ✓ It deals with a specific topic and target audience
- ✓ The structure is more clear as it consists of complete and clear directions, and important terms are clarified
- ✓ Its significance is clearly stated on the covering paragraph/questionnaire itself
- ✓ Less number of private questions which will make the respondents more comfortable in answering
- ✓ It is properly arranged and visually appealing



## An example for a bad questionnaire

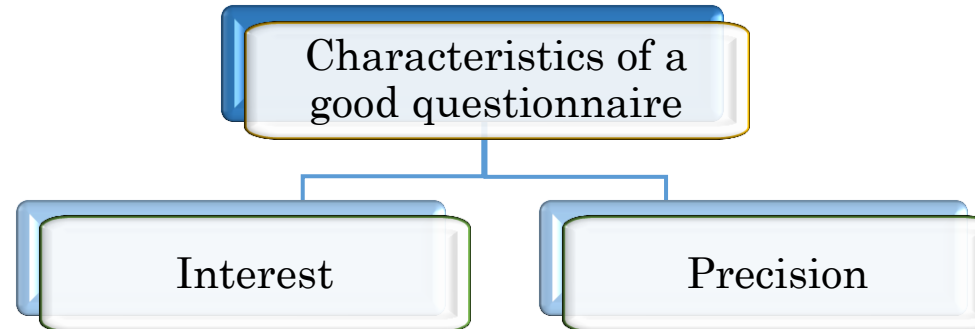
1. Which is your sex?      \_\_\_\_\_ Male      \_\_\_\_\_ Female
2. What is your class standing in the University?  
Fresh \_\_\_\_\_ Soph \_\_\_\_\_ Jr \_\_\_\_\_ Sr \_\_\_\_\_ Special \_\_\_\_\_
3. How old were you at your last birthday?      \_\_\_\_\_ Years
4. What is your major(s)?  
(If unknown at this time write "Unknown" in space provided)
5. What is your current GPA for all college courses?  
\_\_\_\_\_ 3.8 to 4.00      \_\_\_\_\_ 2.8 to 2.99      \_\_\_\_\_ 1.8 to 1.99  
\_\_\_\_\_ 3.6 to 3.79      \_\_\_\_\_ 2.6 to 2.79      \_\_\_\_\_ 1.6 to 1.79  
\_\_\_\_\_ 3.4 to 3.59      \_\_\_\_\_ 2.4 to 2.59      \_\_\_\_\_ 1.4 to 1.59  
\_\_\_\_\_ 3.2 to 3.39      \_\_\_\_\_ 2.2 to 2.39      \_\_\_\_\_ 1.2 to 1.39  
\_\_\_\_\_ 3.0 to 3.19      \_\_\_\_\_ 2.0 to 2.19      \_\_\_\_\_ Below 1.20  
If you do not have any idea of what your GPA is check here
6. What is your current marital status?      \_\_\_\_\_ Never Married, single  
   \_\_\_\_\_ Divorced/Widowed/Separated  
   \_\_\_\_\_ Married
7. Do you have any children [adopted or natural or spouses?]      \_\_\_\_\_ Yes      \_\_\_\_\_ No
8. What is your birth order?      \_\_\_\_\_ I was an "only child"  
\_\_\_\_\_ Raised in Institution      \_\_\_\_\_ Oldest of siblings  
\_\_\_\_\_ Youngest of Siblings      \_\_\_\_\_ In Middle ( some siblings older & younger)

This depicts a bad questionnaire because the structure of this questionnaire is not clear and it contains questions that people may not be comfortable in answering.





## Features of a Well-Designed Questionnaire



**Interest:** Respondents are more likely to complete a questionnaire, which is interesting to them. Some tips to create an interesting questionnaires are:

→ **Visually appealing:** Try adding in colour and images to convey your organisation's brand and personality.

→ **Intriguing and engaging options:** Instead of boring choices like very satisfied, satisfied, etc., try to use more interesting language such as I love you guys, We're still friends, I'm a little upset, and so on.

→ **Make it brief:** Ask only relevant questions. Value the time of the respondents. They will thank you for it.





**Precision:** Questions are considered precise when the researcher receives correct answers for the given to-the point questions.

### Dos and Don'ts of a Questionnaire Design

Dos	Don'ts
1. Clearly defined target respondents, their age, education level, etc.	1. Avoid leading questions, which subtly prompt the respondents to answer in a particular way. Such questions result in false or slanted information. Example: Leading question: You are satisfied with our customer service, aren't you? Non-leading question: How satisfied are you with our customer service?
2. Decide if your questionnaire should be anonymous or not.	2. Avoid technical terms or jargons. Jargon question: Which feature would you like baked into our new product? Non-jargon question: Which feature would you suggest to be included into our new product?



Dos	Don'ts
3. Carefully research and draft questions so that they meet the purpose of the questionnaire and get the desired data.	3. Avoid using terms that the respondents may not be familiar with. <b>Bad question:</b> Do you have a history of carcinomic cancer in your family? Yes/No <b>Good question:</b> Do you have a history of lung/prostate cancer in your family? Yes/No
4. Start your questionnaire with the most relevant questions and then follow naturally.	4. Avoid making the questionnaire too lengthy.
5. Create engaging questions throughout the questionnaire.	5. Avoid repetitive questions.



Dos	Don'ts
6. Word questions so that they are clear and easy to understand.	6. Avoid double-barrelled questions — asking two questions in one line. For example, do not ask: Did this project teach you to discipline your child and manage your home finances?
7. Give space for respondents to write their comments on topics not covered in the questionnaire.	
8. Pilot test the questionnaire before launch.	
9. Use multiple formats of the questionnaire: pen and paper, online, email, telephonic, etc.	



# Types of Questionnaire Designing

Various types of questions in a questionnaire are:

- Open-ended or close-ended questions
- Fixed alternative or multiple choice questions
- Dichotomous questions
- Rating scale (continuum) questions
- Agree to disagree scale questions
- Rank ordering questions
- Projective methods questions



## Open-ended (unstructured) vs close-ended (structured) questions

In open-ended (or unstructured) questions, respondents give answers in their own words

In close-ended questions, they get to choose from a limited number of choices provided to them.

Close-Ended Questions	Open-Ended Questions
Do you like working with us? • Yes • No	Tell us about your experience with our organisation so far.
How satisfied are you with your current job role? • Very satisfied • Somewhat satisfied • Somewhat unsatisfied • Very unsatisfied	What do you expect from this appraisal?
How satisfied are you with your manager? • Very satisfied • Somewhat satisfied • Somewhat unsatisfied • Very unsatisfied	How will you describe your relationship with your manager?



## Fixed alternative or multiple choice questions

- These questions provide multiple choice answers.
- These questions are usually asked when the possible responses are limited and clear such as age, gender, etc.

**Example 1:** How old are you?

- ✓ 12 or younger
- ✓ 13 to 19
- ✓ 20 to 39
- ✓ 40 to 59
- ✓ 60 to 79
- ✓ 80 and older

**Example 2:** Which product would you like to see in the showroom?

- ✓ Sports Utility Vehicle
- ✓ Sedan
- ✓ Hatchback
- ✓ Convertible
- ✓ All the above

## Dichotomous questions

These are also close-ended questions, which can be answered as Yes/No, True/False or Agree/Disagree.

**Example 1:** Have you ever purchased a product or service from our website? Yes/No

**Example 2:** Do you intend to buy a new car within the next six months? Yes/No



## Rating scale/continuum questions

These are close-ended questions where you can assign weights to each answer choice on a scale.

The commonly used rating scales are:

### Likert rating scale

It is typically a five, seven or nine point scale used to measure respondents' agreement with a variety of statements.

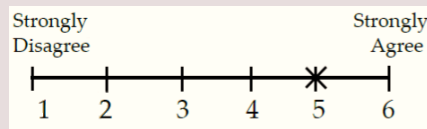
**Example:** The website has a user friendly interface.

- a. Strongly disagree
- b. Disagree
- c. Neutral
- d. Agree
- e. Strongly agree

### Graphic rating scale

This is a line on which respondents place a cross 'X' on any point on the line.

**Example:** The customer service person used check-back to confirm orders.



### Itemised rating scale

This scale is similar to the graphic scale, except that there are a number of categories which can be marked.

**Example:** Evaluate each of the following attributes of our product by checking the appropriate box.

	Excellent	Very good	Good	Average	Poor
1. Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Size	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Durability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Brand name	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





## Agree to disagree questions

In this type of question, respondents need to answer on the agree and disagree responses.

**Example:** The sales representative spent enough time to explain the product features:

- ✓ Strongly agree
- ✓ Somewhat agree
- ✓ Neutral
- ✓ Somewhat disagree
- ✓ Strongly disagree

## Rank ordering questions

In this type of question, the respondent is asked to rank a set of items against each other.

**Example:** Rank the following in order of importance from 1 to 4 where 1 is most important to you and 4 is least important to you.

Speed of service	<input type="checkbox"/>
Ease of parking	<input type="checkbox"/>
Cleanliness	<input type="checkbox"/>
Friendliness of staff	<input type="checkbox"/>



## Projective test questions

- Projective tests are designed to develop an in-depth understanding of hidden motivations.
- These questions allow respondents to 'project' their own thoughts or attitude in the response.

**Example:** Complete the following sentences with the first word or phrase that comes into your mind.

1. My father seldom \_\_\_\_\_
2. Most people don't know that I am afraid of \_\_\_\_\_
3. When I was a child, I \_\_\_\_\_
4. When encountering frustration, I usually \_\_\_\_\_



## Errors in Responses

Error which may occur while creating questionnaires

### Recall loss

- This error occurs when people forget that an event occurred at all.
- For events that happened in the distant past, recall loss dominates.

### Telescoping error

This error occurs where people remember recent events as being more remote than they are, or distant events as being more recent than they are. These errors may lead to faulty marketing campaigns:

- In case of backward telescoping, respondents may overstate their intention to buy a replacement product,.
- In case of forward telescoping, respondents may inaccurately recall the time of their last purchase.

### Differences in responses

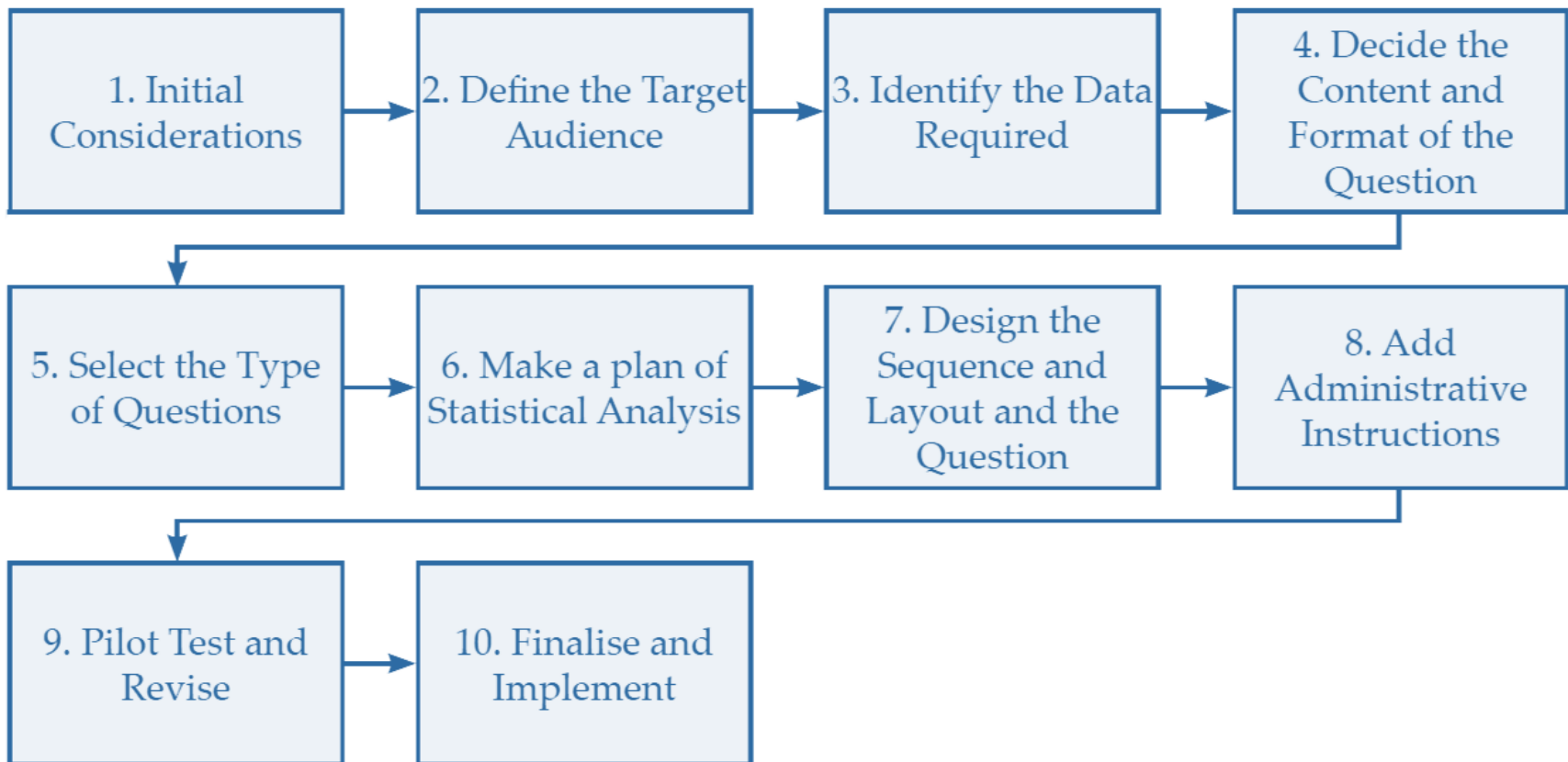
Sometimes responses may be inconsistent or inaccurate due to the following reasons:

- Different response styles
- Different personal factors such as laziness, tiredness, etc.
- Different situations, such as crowded atmosphere
- Difference in administration of questionnaire, such as wording of questions
- Difference due to lack in clarity



# The Steps of Questionnaire Designing

The process of designing a questionnaire involves 10 steps



## 1. Initial considerations

Decide the purpose of your questionnaire. To do so, get familiar with the subject, do a literature review, formulate a hypothesis and then define the information required to test the hypothesis.

## 2. Define the target audience

Depending on it, you can choose whether the questionnaire should be administered to males/females, a particular ethnic group or race, or to people belonging to a particular country, or any such criteria.

## 3. Identify the data required

Make a list of the information/data required.



#### 4. Decide the content and format of the question

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Develop the questions as required. Decide on their phrasing and response format. A well-phrased questions result in more accurate and useful data.

#### 5. Select the type of questions

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In explorative studies, open-ended questions are used, whereas in quantitative ones close-ended questions are used.

#### 6. Make a plan of statistical analysis

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This should include the statistical tests which you intend to use. It is helpful to draw a dummy table with the data of interest.



## 7. Design the sequence and layout of the question

Start with easy questions and then go on to the more difficult questions. Sensitive questions should be placed somewhere in the middle.

## 8. Add administrative instructions

Also, add definitions of keywords for the ease of participants.

## 9. Pilot test and revise

Conduct a pilot test and do revisions as necessary.

## 10. Finalise and implement

Ensure that each question is clear, simple and brief, and the layout is clear. Finally, launch it on the appropriate media formats.





# Designing of an Effective Questionnaire

## Introduction

Start your questionnaire with a brief introduction that:

- informs the purpose of the questionnaire
- explains how the information collected will be used
- assures that the personal information of respondents will remain confidential

## Typeface

Use a clearly legible typeface. Allow for some blank space between questions.

## No breaks

Avoid breaks between question text or instructions to turn pages. Keep all text together for each question.



**Instructions**

Give instructions in italics or bold font to distinguish them from the questions.

**Answer  
Format**

Arrange answers vertically under each question. Any explanatory text or definition should be kept places in parenthesis immediately after the question.

**Logical**

The questionnaire should reflect some natural flow of thoughts, a sequence of events, or a logical conversation, depending upon the subject matter.

**Sensitive  
information**

Sensitive topics, whether personal or societal, should be explored appropriately through indirect questions and are best suited to be placed at the end of survey.



**Pilot study**

Always pilot the questionnaire either with some colleagues or people from the target audience. This will help in detecting any flaws prior to the main survey.

**Grouping**

Section heading may be used appropriately, and similar questions related to a particular topic should be grouped together.

**Neutral language**

The terminology used should be such that it does not lead the respondents to answer in one particular way, i.e., positive or negative.

**Brevity**

Make use of relevant, clear, concise and efficient questions. This will help to achieve desired results rather than including too many questions.



*Thank You*