

A thick black L-shaped frame is positioned on the left and bottom right sides of the slide, framing the central text.

# DESIGNING SURVEY

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**What is the survey?**

# survey

Are written sets of quotations designed of quickly accumulate information from respondents



# Benefits of the survey

- Varied audience
- Quick turnaround is needed
- Respondents are geographically dispersed
- Statistical analysis



# Examples of survey websites



Typeform

# Survey methods

1. Self-administered
2. Researcher-administered

# Self-administered survey

Advantages	Disadvantages
Cost-effective	Unsuitable for literacy
Easy to administer	Susceptible to a nonresponse bias
Suitable for sensitive topics	



# Researcher-administered survey

Advantages	Disadvantages
Respondents of target audience	Costly and time-consuming
Clarifications of ambiguous questions	Contain experimenter bias
High response rates	Social desirability bias

# Types of questions in the survey

**Closed-ended  
(restricted-choice)**

Limit answers

Collecting data on  
categorical/quantitative  
variables

**Open-ended  
(long-form)**

Broad range of  
answers

Require more time and  
effort from  
respondents

# Example: Interval variables

**On a scale from 0-10, how likely are you to recommend this product to a friend?**

0	1	2	3	4	5	6	7	8	9	10
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Not at all likely

Extremely likely

# Example: Nominal variables

What is your race?

- White
- Black or African American
- American Indian or Alaska Native
- Asian

Are you satisfied with the current work-from-home policies?

- Yes
- No

# Example: Ordinal variables

What is your age?

- 15 or younger
- 16–35
- 36–60
- 61–75
- 76 or older

# Example: Likert-type questions

How satisfied or dissatisfied are you with your online shopping experience today?



Very Unsatisfied



Unsatisfied



Neutral



Satisfied



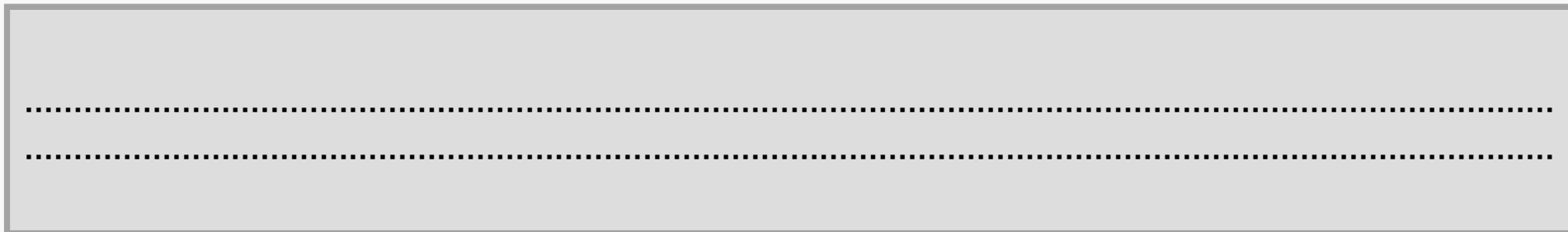
Very Satisfied

# Example: Open-ended questions

1. How do you feel about open science?



2. How would you describe your personality?



# Question wording

1. Use clear language
2. Use balanced framing
3. Avoid leading questions
4. Keep your questions focused (avoid double-barreled questions)



# Example: Unbalanced vs balanced frames

Unbalanced

Do you favor...?

Do you agree that...?

Balanced

Do you favor or oppose...?

Do you agree or disagree that...?

# Example: Leading questions

- Experts agree that a well-balanced diet provides sufficient vitamins and minerals, and multivitamins and supplements are not necessary or effective. Do you agree or disagree that multivitamins are helpful for balanced nutrition?

# Example: Double-barreled question

Do you agree or disagree that the government should be responsible for providing clean drinking water and high-speed internet to everyone?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Example: Ask about one topic at a time

Do you agree or disagree that the government should be responsible for providing clean drinking water to everyone?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Do you agree or disagree that the government should be responsible for providing high-speed internet to everyone?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Question order

## Logically:

Using a logical flow to question order starting with simple questions and ending with more complex questions.

# Example: Order effects

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**Questionnaire:**

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Demographic information:

---

Gender: Male/Female

---

Age

---

Year of graduation for the last degrees

---

Qualification:

---

Specialty:

---

How many patients do you treat per day as average

---

Area of work:

---

Questions of knowledge about principles and practice of orthodontic treatment (Yes/No type questions):

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1. What is the suitable age for starting orthodontics treatment?
  2. Can malocclusions be treated during mixed dentition stage?
-

# Guides to design



1

Identify what you want to cover in a survey

Don't mince your words

2



3

Ask only one question at a time

Be flexible with your options

4



5

Open/Closed-ended question, it's a tough choice

It is important to know your audience

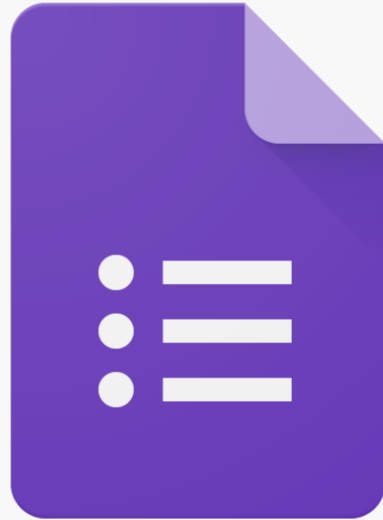
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Choosing the right tool is important

# How to design a survey using Google Forms?



Google Forms



Blank Blank Quiz Exit Ticket Assessment Worksheet

Recent forms Owned by anyone

Untitled form Questions to me  
Opened 6 Mar 2021 Opened 27 Feb 2021

# Group workshop

Making a survey using google form and put one question of each type:

- Open-ended question
- Closed-ended questions: (Interval, Nominal, Ordinal and Likert-type questions)

