



# Preferences, participation, and assessment of the experience when answering questions about the books participants have at home

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# Introduction

- Visual data (i.e., images and videos) as a new data source collected through surveys has gained relevance during the last years.
- They have the potential to **decrease the respondents' burden, increase the data accuracy and quality, and provide new insights** compared to conventional survey questions (Revilla, 2022).
- Literature so far is limited, and research on whether survey respondents will engage in sending images or videos through web surveys is still needed.
- More information is necessary for topics with relevance for social sciences. Particularly, I will focus on a popular question in social sciences surveys: **the number of books at home**.

## Background

### Actual participation

- The levels of participation also vary, ranging from **10%** for receipts (Jäckle et al., 2019) to **55%** when asked for a photo of the place the respondent is (Bosch et al., 2019).
- Moreover, **research on similar topics might also present different results**: when asked to send screenshots of the reports of the iOS Screen Time function included in their smartphones, the levels of participation have been of 12% (Ohme et al., 2020) and 78% (Sewall et al., 2022).
- **Item nonresponse** (i.e., non providing an answer) is greater in image-based questions than in conventional questions (Bosch et al., 2022; Ilic et al. 2022).
- Participation rates might vary **up to 72,6 percentage points in detriment of image-based questions** (Ilic et al., 2022).

## Background

### Preferences for image-based or conventional questions

- In a study offering respondents to choose their preferred method (Ilic et al. 2022), **they chose images (57%) over conventional questions (43%)**.
- However, the participation rate of respondents choosing images was **generally lower than of those choosing conventional questions**.

## Background

### **Respondents' experience when answering through image-based questions**

- A study measuring how is the respondents' experience (Bosch et al., 2022) found that:
  - **Completion time** is higher for image-based questions.
  - Respondents **like** conventional questions better and find them **easier** than image-based questions.

# Research questions

RQ1: To what extent do respondents **prefer** to send images over answering a set of conventional questions, or vice versa?

RQ2: What are the levels of **participation** in conventional and in image-based questions, and to what extent do they differ?

RQ3: How is the **experience** of respondents answering conventional and image-based questions?

RQ4: How do the respondents' **characteristics** influence their...

- RQ4a: **preferences**,
- RQ4b: **participation**, and
- RQ4c: **experience** in image-based questions versus conventional questions?

# Methods

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## **Text**

Which asks for the number, language, and storage of books by using conventional questions.

## **TextPlus**

Similar to **Text**, but with a visual example for the number-of-books question.

# Methods

**Message for group TextPlus:** *To help you estimate the total number of books that you have in your main residence, please, look at the examples below: you can see that a 74 centimeters long shelf can contain from around 30 to almost 80 books, depending on the thickness of the books.*



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## Text

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## TextPlus

Similar to **Text**, but with a visual example for the number-of-books question.

## Images

Which asks to send images of the books respondents have at home.

# Methods

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This group will be asked conventional questions first, and then image-based questions.

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This group will answer conventional questions with and without the example.

## TextPlusImages

This group will be asked conventional questions first, and then image-based questions.

## ImagesText

This group will be asked image-based questions first, and then conventional questions.



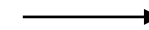
# Methods

**Group Choice**  
(*n*=300)

Text or Images

**Group TextTextPlus**  
(*n*=300)

Text



TextPlus

**Group TextPlusImages**  
(*n*=300)

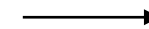
TextPlus



Images

**Group ImagesText**  
(*n*=300)

Images



Text

Data will be collected through the Netquest opt-in panel in Spain.

# Questionnaire

Two main conditions will be required from respondents:

- That they answer from their **main residence**.
- That they answer the survey from a **smartphone or tablet**, not from a computer → related to the possibility of capturing photos around the place.

Both conditions will be presented at the beginning of the survey.

# Questionnaire

The questionnaire counts a maximum of **70 questions**. The most relevant dimensions are:

- Sociodemographic characterization of respondents
- Usage of camera-related functions with their mobile devices and comfort with new technologies.
- Experimental block:

## **Conventional questions**

- a. 4 questions about the **number** of books
- b. 3 questions about the **language(s)** of the books
- c. 4 questions about how books are **stored**
- d. 3 questions for the respondents' **evaluation**  
(easy, like, reasons for dislike)

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### Image-related questions

- 1 question requesting for the **images**
- 3 questions for the respondents' **evaluation** (easy, like, reasons for dislike)
- 1 question asking for **difficulties**

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# Contribution

This experiment will help knowing:

- The levels of participation when using two methods, getting to know **how the two of them compare when measuring the same concept.**
- The respondents' preferences and how they engage when choosing **the way they answer.**
- Which types of audience, based on their characteristics, are more suitable for these new collection techniques.
- Test how **WebdataVisual** works in real web survey.
- How innovation (particularly, the collection of images) can be implemented when measuring **relevant concepts in social sciences.**

# Main challenges

- Implementation of a **tool** that allows collecting images.
- Images need to be **classified** (through manual and/or automatic classification).
- Development of **classification guidelines**: which information will be extracted and how.
- People need to be in their **residence** when answering.
- **Ethical issues** (getting the approval, and how to deal with images with personal or sensitive information).

# Thanks!

## *Questions?*

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<https://www.upf.edu/web/webdataopp>



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