

Designing Effective Questionnaires in Language Research

1-Purpose and Definition of Questionnaires

Questionnaires are efficient and widely used tools for collecting data in educational, social, and linguistic research. They enable researchers to gather large amounts of information from participants in a relatively short amount of time. Depending on how they are designed, questionnaires can generate both quantitative data—such as numerical responses that can be statistically analyzed—and qualitative data that provide deeper insights into opinions, attitudes, and experiences. According to Wilson and McLean (1994), "The questionnaire is a widely used and useful instrument for collecting survey information, providing structured, often numerical data..."— Wilson and McLean (1994: 3)

2- Types of Questionnaires

Questionnaires can be broadly classified into **structured**, **semi-structured**, and **unstructured**, depending on their format and purpose:

- **Structured questionnaires** consist entirely of closed questions (e.g., yes/no, rating scales). They are typically used for large-scale, quantitative studies where consistency in responses is crucial.
- **Semi-structured questionnaires** contain a mix of open- and closed-ended questions. This format offers some flexibility, allowing respondents to elaborate on certain topics while still providing quantifiable data for analysis.
- **Unstructured questionnaires** rely mostly on open-ended questions and are commonly used in qualitative research. They give respondents the freedom to express themselves in their own words, capturing deeper insights and personal perspectives.

The decision on which format to use often depends on the **sample size and the depth of data required**. As the *Cohen, Manion, & Morrison (2018, p. 320)* explained "Although there is a

large range of types of questionnaire, there is a simple rule of thumb: the larger the size of the sample, the more structured, closed and numerical the questionnaire may have to be, and the smaller the size of the sample, the less structured, more open and word-based the questionnaire may be.”

3. Types of Questions in a Questionnaire

In designing a questionnaire, the type of question you choose is crucial because it shapes the kind of data you will collect and influences the ease of analysis and interpretation.

1. Closed-ended Questions

Closed questions limit the answers to specific choices, making them quick to answer and easy to code statistically. These include:

1. **Dichotomous Questions:** Respondents choose between two options (e.g., Yes/No; Male/Female).
→ *These provide nominal data useful for simple classifications and cross-tabulations.*
2. **Multiple Choice Questions:** Respondents select from a list of mutually exclusive options.
→ *Options must be comprehensive and piloted to ensure they reflect all likely answers*
3. **Rating Scales:** Respondents rate something on a scale (e.g., from "strongly disagree" to "strongly agree")

→ *Rating scales are ordinal and very useful for tapping attitudes and perceptions*
4. **Ranking Questions:** Ask respondents to place items in order of importance or preference.
→ *Useful for identifying priorities but can be cognitively demanding if too many items are ranked.*
5. **Matrix Questions:** Several questions using the same response scale organized in a grid format.
→ *Economizes space but risks "response set" bias if not carefully designed.*
6. **Constant Sum Questions:** Respondents distribute a number of points across several items to show relative importance.

→ *This method captures weighting between preferences or behaviors.*

2. Open-ended Questions

Open-ended questions allow participants to respond in their own words. They are:

1. Ideal for exploratory research or when researchers do not want to limit possible answers.
2. Valuable for gaining detailed insights but are more complex to analyze due to the variety of responses.

3. Contingency and Filter Questions

These types guide respondents to relevant questions based on previous answers (e.g., "If you answered 'Yes' to Q3, go to Q5").

- *They help streamline the questionnaire and avoid irrelevant questions.*

“The kinds of questions that are asked in a questionnaire should be directly related to the purposes of the questionnaire and to the kinds of data required to address the research questions”. Thus, always design your questions deliberately based on the **research objectives** and **the type of data** you aim to collect.

4. Sequencing and Layout

The sequencing and layout of a questionnaire play a crucial role in maintaining respondent engagement and ensuring high-quality data. It is important to begin with simple, non-sensitive questions to build rapport and ease respondents into the process. Questions should be logically grouped by topic to create a coherent flow, helping participants move smoothly from one idea to the next. Sensitive or personal questions, such as those about demographics (e.g., age, income, education), should be placed toward the end of the questionnaire when respondents are more comfortable. Furthermore, the overall layout should be kept clean and uncluttered, with clear instructions and consistent use of scales, so that participants can easily understand and complete the questionnaire without confusion.

- A Decisions about question content**
- 1 Is the question necessary? Just how will it be useful?
 - 2 Are several questions needed on the subject matter of this question?
 - 3 Do respondents have the information necessary to answer the question?
 - 4 Does the question need to be more concrete, specific and closely related to the respondent's personal experience?
 - 5 Is the question content sufficiently general and free from spurious concreteness and specificity?
 - 6 Do the replies express general attitudes and only seem to be as specific as they sound?
 - 7 Is the question content biased or loaded in one direction, without accompanying questions to balance the emphasis?
 - 8 Will the respondents give the information that is asked for?
- B Decisions about question wording**
- 1 Can the question be misunderstood? Does it contain difficult or unclear phraseology?
 - 2 Does the question adequately express the alternative with respect to the point?
 - 3 Is the question misleading because of unstated assumptions or unseen implications?
 - 4 Is the wording biased? Is it emotionally loaded or slanted towards a particular kind of answer?
 - 5 Is the question wording likely to be objectionable to the respondent in any way?
 - 6 Would a more personalized wording of the question produce better results?
 - 7 Can the question be better asked in a more direct or a more indirect form?
- C Decisions about form of response to the question**
- 1 Can the question best be asked in a form calling for check answer (or short answer of a word or two, or a number), free answer or check answer with follow-up answer?
 - 2 If a check answer is used, which is the best type for this question – dichotomous, multiple-choice ('cafeteria' question), or scale?
 - 3 If a checklist is used, does it cover adequately all the significant alternatives without overlapping and in a defensible order? Is it of reasonable length? Is the wording of items impartial and balanced?
 - 4 Is the form of response easy, definite, uniform and adequate for the purpose?
- D Decisions about the place of the question in the sequence**
- 1 Is the answer to the question likely to be influenced by the content of preceding questions?
 - 2 Is the question led up to in a natural way? Is it in correct psychological order?
 - 3 Does the question come too early or too late from the point of view of arousing interest and receiving sufficient attention, avoiding resistance, and so on?

(Sellitz *et al.* 1976 in Cohen, Manion, & Morrison, 2007, p. 320).

5. Piloting & Testing

1. Test with a small group first.
2. Ensure questions are clear, relevant, and yield expected data.
3. Revise based on feedback.

“Pilot studies help avoid ambiguity and ensure completeness”
— *Cohen et al. (2018)*

6. Administering the Questionnaire

1. Can be delivered via paper, email, or online platforms.
2. Ensure instructions are easy to follow.
3. Consider incentives and accessibility to improve response rates.

Conclusion

Designing an effective questionnaire requires clear research goals, ethical awareness, and careful question construction. A good questionnaire respects participants' time, avoids bias, and is structured to provide usable data for your research project.

References

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