

Course : Research Research methodology

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Level : Master two

Semester : Three

Lecture : 4

Questionnaires

Lecture objectives

In this lecture, students will be introduced to:

- the types of questionnaires
- the types of questions that can be used in a questionnaire close-ended and open-ended)
- the format of a questionnaire
- The layout of a questionnaire
- the types of questions to be avoided
- how to validate and pilot the questionnaire
- Strength and weaknesses of the questionnaire

Introduction

One of the most common methods of data collection in second language (L2) research is to use *questionnaires* of various kinds. The popularity of questionnaires is because they are easy to construct, extremely versatile, and uniquely capable of gathering a large amount of information quickly in a form that is readily processable (Dornyei, 2003). The field of questionnaire design is very vast. This course provides an introduction to its key elements.

1. Definition of questionnaire

Questionnaires are any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers" (Brown, 2000, p.6 in Dornyei, 2003, p.5). Questionnaires are often referred to under different 'batteries, ' 'checklists, ' 'scales, ' 'surveys, ' 'schedules, ' 'studies, 'profiles, ' 'indexes/indicators, ' or even simply 'sheets' (Aiken, 1997 in Dornyei, 2003, p.5).

1. Types of questionnaires

The researcher can select several types of questionnaires, from highly structured to unstructured. They are often referred to as:

- **Closed-ended questionnaires (structured)**. This type of questionnaire is used to generate statistics in quantitative research and can be scanned straight forward into a computer for ease of analysis.
- **-Open-ended questionnaires (unstructured)**. This type is used in qualitative research. The questionnaire does not contain boxes to tick but instead leaves a blank section to write in an answer. . As there are no standard answers to these questions, data analysis is more complex.

- **Combination of closed-ended and open-ended questionnaires (semi-structured).** Many questionnaires begin with closed questions, with boxes to tick or scales to rank, and end with open questions for more detail responses.

2. Data yielded by questionnaires

1. Questionnaires can yield three types of data about the respondents:

- **Factual questions** which are used to find out certain facts about the respondents, such as demographic characteristics (age, gender and race), residential location, material and socio-economic status, level of education, occupation, experience...
- **Behavioural questions** which are used to find out what the respondents are doing or have done in the past focusing on actions, lifestyles, habits and personal history.
- **Attitudinal questions** which are used to find out what people think, covering attitudes, opinions, beliefs, interests and values.

3. Types of questionnaire items

Different types of items can be used depending on how structured the questionnaire is, the type of study, the sample to be used and many other reasons.

3.1. Closed question items:

Close-ended questions require pre-defined answers or a choice from options.

- **Dichotomous questions: Yes/no, true/false**
Dichotomous questions are a type of survey questions that provides two options, while generally it is true that the more response options an item contains, the more accurate evaluation it can yield. There might be cases when only a polarized yes-no or true-false decision can be reliable.
- **Multiple choice: It is familiar because of its popularity.**

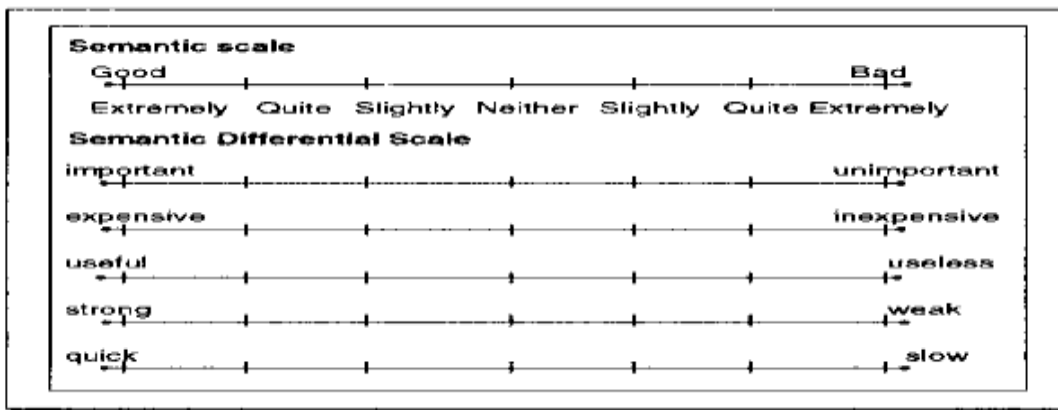


- **Likert scales:** the most famous type of closed ended items is the 'Likert scale which consists of a characteristic and the respondents are asked to indicate the extent to which they agree or disagree with it by ticking or circling. Likert scales was developed in 1932 by [Rensis Likert](#), a psychologist to better understand the feelings of respondents with a given balanced set of choices. It allows researchers to gain insights on perceptions, behaviors, feelings and more by asking respondents to self-report their reactions based on how they feel using the Likert scales

Please select the number below that best represents how you feel about your recent online software purchase for each statement.

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1. The software I wanted was easy to find					
2. The checkout process was easy					
3. The software solved my needs					
4. I am happy with my purchase					

- Semantic differential scales:** in this technique, respondents are asked by marking with a tick or an 'X' between two bipolar adjectives at the extreme. For example:



- Rank order items:** The rank order question is akin to the multiple choice question, but it asks respondents to identify priorities. For example: please indicate your priorities by placing numbers in the boxes to indicate your views, 1= the highest priority; 2= the second highest priority and so on (see the examples in Cohen et.al., 2007, p.325)
- Rating scales:** they provide a range of responses to a given question or statement. Numerical scales give so many marks out of so many, that is assigning one of several numbers (which corresponds to a series of ordered categories).

	Please rate your most recent restaurant experience in the following areas				
	Poor 1	2	3	4	Excellent 5
Dining Room Cleanliness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Courtesy of Wait Staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speed of Meal delivery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of meal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3.2 Open-ended questions: open-ended questions include items where the actual question is not followed by response options. This kind of question works well if they are not completely open but contain certain guidance.

4. The format of the questionnaire

The questionnaire includes some parts as any kind of writing as follows:

- **Cover page**
- **Title:** like any other piece of writing, a questionnaire should have a title to identify the domain of the investigation.
- **General introduction:** 'the opening greeting' usually describes the purpose of the study. The important functions of this section involve emphasizing that here are no right or wrong answers and saying 'thank you.'
- **Specific instructions:** these explain and demonstrate how respondents should go about answering the questions.
- **Questionnaire items:** These constitute the main body of the questionnaire. They need to be very clearly separated from the instructions. This is where different typefaces and font styles are useful.
- **Additional information:** at the end of the questionnaire, we may add information such as contact name.

Final 'thank you.'

5. Rules about item wording

The format of your questions will affect the answers; keep them short and understandable.

- Use short and simple items
- Use simple language
- Avoid ambiguous and loaded words and sentences.
- Avoid negative constructions
- Avoid double barrelled questions
- Avoid items that are likely to be answered in the same way by everybody.
- In a rating scale, better to include both positive and negative word items (Dörnyei, 2003).
- Avoid jargon (words not usually used)
- Avoid leading questions (containing judgment)
- Avoid double negatives

The question type and the layout of the questions are of great importance.

6. Grouping and ordering items

Item sequence is a very significant factor. Items of the same type need to be clustered into well-marked sub-sections, separated from each other by a clear instruction to highlight the form

The items should seem as a series of logically organized sequences, hence we need to follow some organizing principles.

Additional Remarks

- **The initial part of the questionnaire**, as any other piece of writing is very important as it sets the tone.
- **The first opening questions** need to be easy and interesting.
- **Factual questions** come next
- **Real open questions that require substantial and creative writing at the end**

7. Lay out and length of the questionnaire

Layout: It is an important aspect. Three points in particular are worth bearing in mind.

- **Format of the questionnaire:** it can be as a Booklet format
- **Appropriate density:** it refers to how much we put on a page
- **Items sequence: we need to decide on the order of items.** In addition to that the opening questions need to be interesting, relatively simple, and at the same time focusing on important aspects. It is better to use close-ended at the beginning and open-ended questions at the end. In addition, mixing up the scales creates a sense of variety and prevents respondents from repeating previous answers.

Length of the questionnaire: There is no rule ; this depends on the type of questionnaire and the type of Study. But most researcher agree that anything that is more than 4-6 pages long and which requires over half an hour to complete may be considered too much.

8. Important steps after the construction of a questionnaire:

- **Validating the questionnaire:** to make sure the questionnaire measures what it aims to measure.
- **Piloting the questionnaire:** The questionnaire should be administered to a small number from the population to check its feasibility.
- **Administering the questionnaire**
- **Analyzing the questionnaire**

To validate the questionnaire, the following questions are addressed.

Is the questionnaire measuring what it intended to measure?

- Does it represent the content?
- Is it appropriate for the sample/ population?
- Is it comprehensive enough to collect all the information?
- Is it comprehensive enough to collect all the information needed to address the purpose of the study?
- Does it look like a questionnaire?

How can a questionnaire be validated?

The first step is to establish **face validity**. This can be checked by experts who evaluate whether the questionnaire effectively capture the topic under investigation.

Internal consistency can be checked through a standard test called Cronbach's Alpha (CA) which ranges from 0 to 1.0. The values should be at least **0.70 or higher**.

9. Strength and weaknesses of questionnaires

Strengths

- Collect large amounts of data about people's attitudes and perceptions.
- Supply standardized answers
- practical
- Economical
- Easier to be administered
- Easy analysis and visualization...

Weaknesses

- People may not tell the truth/ the researcher has no opportunity to check the truthfulness
- Limited responses
- Poor response rate
- Poorly completed answers
- Unreliability
- Illegibility ...

10. Test yourself

- What is the selection of questions based on?
- What are you required to do after the selections of the needed questions?
- How can you validate a questionnaire?
- What is piloting? Why is it important?
- List some ways of administering a questionnaire.
- What are the different phases involves in questionnaire analysis?
- Refer to some master dissertations questionnaires in the library and try to sort out the positive and negative points in them.

References

Descombe, M. (2003). The good research guide for small-scale social research projects, 2nd edn. Maidenhead: Open University.

Cohen, L, Manion, L & Morison, K. (2007). Research methods in education. New York: Routledge.

Checklist for the production of a questionnaire

When producing a questionnaire for research you should feel confident about answering 'yes' to the following questions:

- 1 Has the questionnaire been piloted?
- 2 Is the layout clear?
- 3 Has the questionnaire got a suitable cover page?
- 4 Is there an explanation of the purpose of the questionnaire?
- 5 Is there a return address on the questionnaire?
- 6 Have thanks been expressed to the respondents?
- 7 Are there assurances about confidentiality of information or anonymity?
- 8 Have serial numbers been given to the questionnaires?
- 9 Are there clear and explicit instructions on how the questions are to be completed?
- 10 Have the questions been checked to avoid any duplication?
- 11 Are the questions clear and unambiguous?
- 12 Are the essential questions included?
- 13 Are the non-essential questions excluded?
- 14 Are the questions in the right order?
- 15 Has the questionnaire been checked for spelling and typographical errors?

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