

Chapter 10

Testing Survey Questions

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EXHIBITS 1-13

Below follow exhibits 1-13 accompanying Chapter 10. Note that the numbering refers to the corresponding sections in Chapter 10.

Web material accompanying *The International Handbook of Survey Methodology*

10.2.4 Limitations of the traditional field test for interview surveys

Exhibit 1: Interviewer Rating Form

INTERVIEWER RATING FORM

Use the following code for each potential problem:

- A No evidence of a problem
- B Possible Problem
- C Definite Problem

COLUMN 1 Should be used for potential problems due to your having trouble reading the question as written

COLUMN 2 Should be used for potential problems due to respondents not understanding words or ideas in the questions.

COLUMN 3 Should be used for potential problems due to respondents having trouble providing answers to the question.

	Column 1	Column 2	Column 3		
Question Number	Hard to Read	R has problem understanding	R has trouble providing answer	Other problems	Comments

Source: Fowler, F.J.Jr. and Roman, A.M. (1992), A Study of Approaches to Survey Question Evaluation, Final Report for U.S. Bureau of the Census. Can be obtained from CSMR, SRD, US Bureau of the Census, Washington, DC.

10.3.2 Systematic reviews of questionnaires for interview and self-completion questionnaires

Exhibit 2: Cognitive Forms Appraisal Example

Comprehension			Definition of Cognitive Task			Information Retrieval	Judgement	Response Generation /Section
Instructions	Questions	Responses	Reference Period	Reference Set	Task Definition	Mnemonic Processes	Information Integration	Response Description
<p><i>Misleading Instruction</i></p> <ul style="list-style-type: none"> • Conflicting instructions • Inaccurate instructions <p><i>Unclear Instructions</i></p> <ul style="list-style-type: none"> • Complex Syntax • Unclear Examples • Unclear Layout • Hidden Instruction 	<p><i>Technical Terms</i></p> <ul style="list-style-type: none"> • Present • Undefined • Ambiguous • Vague <p><i>Question Structure</i></p> <ul style="list-style-type: none"> • Hidden Question • Unclear Goal • Implicit Assumption • Q/A Mismatch • Complex syntax • Several Questions • Several Definitions • Violates Conversational Conventions 	<p><i>Response Terminology</i></p> <ul style="list-style-type: none"> • Ambiguous Categories • Vague Terms • Complex Syntax • Hidden Definitions <p><i>Response Structure</i></p> <ul style="list-style-type: none"> • Boundary Problems • Categories Not Mutually Exclusive • Categories Not Exhaustive • Non-Dominant Ordering 	<ul style="list-style-type: none"> • Unanchored Boundary • Non-Fixed Boundaries • Ref Period Change • Ill-Defined Ref Period • Carry-Over Ref Period Def • Embedded Reference Period • Undefined Ref Period • Ref Period Length Problem • Multiple Interpretation of Ref Period Possible <p><i>Reference Period Description</i></p> <ul style="list-style-type: none"> • Lifetime • 12 Months • 30 Days • Tied to Behaviour / Previous Q 	<ul style="list-style-type: none"> • Consistent Pattern of Behaviour Implicit • Vague Ref Set • Complex Ref Set <p><i>Reference Set Changes</i></p> <ul style="list-style-type: none"> • Domain Change • Level Change • Abrupt: Level + Domain • Carry-Over Ref Set <p><i>Referent Set level</i></p> <ul style="list-style-type: none"> • Basic • Subordinate • Superordinate • Multilevel 	<ul style="list-style-type: none"> • Estab Ref Set Boundary • Estab Ref Period Boundary • Remember Episode • Remember Set of Episodes • Remember General Info • Remember Previous Answer • Determine +/- Occurrence • Determining +/- Match • Determine Date/Onset • Determine Age • Estimate Duration • Estimate Average • Estimate Total • Complex Estimation • Recognize/Answer Hidden Question • Generate Response 	<ul style="list-style-type: none"> • Recall • Recognition • Heuristic/ Inference • Mixed Above <p><i>Memory Context</i></p> <ul style="list-style-type: none"> • General Self-Knowledge • General World Knowledge • Specific Behaviour(or Try) • Class of Behaviours • Affect/Attitude • Time Point/Interval <p><i>Problems</i></p> <ul style="list-style-type: none"> • High Detail • Low Detail • Unexpected Detail <p>Shift-Psych Ref Period</p>	<ul style="list-style-type: none"> • Count • Qualitative Judgement • Quantitative Judgement <p><i>Information Evaluation</i></p> <ul style="list-style-type: none"> • Accuracy Eval Possible • Sensitive Behaviour • Sensitive Attitude • Sensitive (general) • Social Undesirable <p><i>Consequence Evaluation</i></p> <ul style="list-style-type: none"> • Safety Consequences • Legal Consequences • Social Consequences • Behavioural Consequences 	<ul style="list-style-type: none"> • Yes/No • Qualitative: Categorical • Qualitative: Ordinal • Quantitative: Count • Quantitative: Complex • Duration • Time Point/ Most Recent • Age <p><i>Information Response Congruence</i></p> <ul style="list-style-type: none"> • Congruent • Incongruent

Source: Forsyth, B.H. and Hubbard, M.L. (1992). "A Method for Identifying Cognitive Properties of Survey Items". Paper presented at the Annual Meeting of the American Statistical Association, Boston, MA.

10.3.2 Systematic reviews of questionnaires for interview and self-completion questionnaires

Exhibit 3: Classification for Systematic Review of the Questionnaire

Problem	Description
Applicability/Suitability	Question is not realistic enough: <ul style="list-style-type: none"> o Non-existent or inaccessible data o Hypothetical or fictitious data o Data referring to someone else
Question meaning	Question has unclear/ambiguous/unintended meaning: <ul style="list-style-type: none"> o Misleading or unclear instructions o Reference set (frame) not sufficiently specified o Ambiguity or vagueness in question meaning o Unintended, though univocal, question meaning
Key concept meaning	Key concept: <ul style="list-style-type: none"> o has unclear or ambiguous meaning o is unknown or unnoticed
Cognitive difficulty	High cognitive burden to respondent: <ul style="list-style-type: none"> o Difficult recall/recognition o Difficult deduction (estimation, guess) o Difficult judgement o Complicated answer format
Technical difficulty	Complicated question conditions / presentations <ul style="list-style-type: none"> o Too many key concepts or clauses o Double negation / other syntax complexity o Implicit assumptions o Unclear presentation (lay-out intonation)
Logical flaw	Formulation or routing logically incorrect: <ul style="list-style-type: none"> o Question-answer (Q/A) discrepancy o Incorrect/incomplete Q/A structure o Conflict with previous answers o Conflict with language rules
Motivation/Affection	Undesirable questions: <ul style="list-style-type: none"> o Goal of question unclear or insufficient o Too intrusive or personal a question
Social Norms	Unbalanced, directive or non-neutral question: <ul style="list-style-type: none"> o Non-neutral concept or directive task o Unbalanced or non-neutral answer o Risk of social desirability

Source: Akkerboom, H. and Dehue, F. (1997), The Dutch Model of Data Collection Development for Official Surveys, *International Journal of Public Opinion Research*, 9(2), 126-145.

10.3.4.c Behaviour coding form **Exhibit 4: Behaviour Coding Form Example**

CPS Monitoring Form

Interviewer ID: _____ Version: A B C Monitor's Initials _____

Case ID: _____ Month in sample: 1 2 3 4 Date: _____

Gender of respondent: M F Status of call: C BO CB Page _____ of _____

Roster position	Question number	Interviewer				Respondent							Notes
		Exact	Slight Change	Major Change	Probe, Feedback, or verify	Gives adequate answer	Gives qualified answer	Gives inadequate answer	Asks for clarification	Interrupts	Doesn't know	Refuses to answer	

Source: Campanelli, P., Rothgeb, J., Esposito, J., and Polivka, A. (1991, May), Methodologies for Evaluating Survey Questions: An Illustration from a CPS CATI/RDD Test, paper presented at the annual meeting of the American Association for Public Opinion Research, Phoenix, AZ.

10.3.4.g Summary

Exhibit 5: Overview of studies using behavior coding for the evaluation of questions

Study Year and author(s)	Interviews	Procedure	Coding scheme	Sequence	Analysis	Criterion for 'problem question'	Method for diagnosis of the problem
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1969 Marquis & Cannell	PAPI N=181 >71 Q	AT	ALL 17 IC 10 RC 10 I&R	-	FAC	<85% correct asked <85% adequate answers	
1979 Morton-Williams	PAPI N=72 112 Q	AT	SEL 14 IC 17 RC	-	FAC	<85% correct asked <85% adequate answers >20% second activity	code pattern; coders' notes
1982 Brenner	PAPI N=60 75 Q	AT	ALL 18 IC 6 RC	-	FAC FAP		
1985 Prüfer & Rexroth study 2	PAPI N=60 57 Q	AT	ALL 57 IC 28 RC	3	FAS	% ideal sequences	code pattern
1987 Sykes, Morton-Williams study 1	PAPI N=89 77 Q	AT	SEL 1 IC 5 RC	-	FAC	Mean % +5% problem indicators	code pattern; follow-up interviews
1991 Oksenberg, Cannell, Kalton, gr. 1	PAPI N=60 60 Q	L	SEL 3 IC 7 RC	-	FAC	% respondent problem % no adequate answer	code pattern; coders' notes probe questions

Exhibit 5: (continued)

Study Year and author(s)	Interviews	Procedure	Coding scheme	<i>Sequence</i>	Analysis	Criterion for 'problem question'	Method for diagnosis of the problem
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1992 Sykes & Collins	PAPI N=68 151 Q	AT	SEL 35 IC 19 RC	>6	FAS	% straight forward sequences	code patterns
1992 Esposito, Rothgeb, Polivka, Hess, Campanelli	CATI N=229 57 Q	L	ALL 4 IC 7 RC	-	FAC	<90% adequate answers	debriefing I's and R's; distribution of nonresponses
1992 Fowler	CATI N=110 60 Q	AT		-		>15% requests for clarification >15% inad. answers	revision of 7 problematic questions and retesting
1994 Cahalan et al	CATI N=98 120 Q	AT	SEL 15 IC 8 RC	-	FAS	<85% of 'asked & answered only' sequences	code pattern
1995 Bates & Good	CAPI N=186 18 Q	AT	ALL 4 IC 5 RC	-	FAC	>15% incorrect asked >10% question omitted	code pattern
1995 Zouwen & Dijkstra	PAPI N=185 9 Q	TR	SEL	4	FAS	>60% non-paradigmatic sequences	analysis of transcripts
1997 Dykema Lepkowski Blixt	PAPI N=445 10	AT	SEL 4 IC 6 RC	-	FAC accu racy	probability of accurate answer	

Exhibit 5: (continued)

1999 Hess, Singer, Bushery	TI N=136 34 Q	AT	SEL 5 IC 8 RC	-	FAC relia bility	<85% correct asked <85% adeq. answer reliability of answers	code pattern
2000 Comijs, Dijkstra, Bouter, Smit	PAPI N=143 23 Q	TR	ALL	2	FAC FAS	% questions skipped % unusable answers	code pattern
2002 Zouwen & Dijkstra	CATI N=54 37 Q	AT & TR	SEL	3	FAS	>60% non- paradigmatic sequences	task difficulty scores expert panel
Present Study	CAPI N=201 8 Q	TR	SEL 8 IC 7 RC	3	FAC FAS	% paradigmatic - % inadequate sequences	code pattern content analysis of transcripts

Key:

Column 2: PAPI = Paper and Pencil Interview, CATI = Computer-Assisted Telephone Interview, CAPI = Computer-Assisted Personal Interview, N= number of questionnaires, Q = number of questions.

Column 3: AT = Coding from audio tapes, L = Live coding, TR = Coding from transcripts, AT&TR = Combination of transcripts and tapes

Column 4: ALL = Coding all verbal behaviors, SEL = Selective coding, i.e., coding only behaviors that deviate from suggested sequence, IC = Number of different codes for the interviewer, RC = Number of different codes for the respondent

Column 5: - = Only separate behaviors coded, Number = number of categories of sequences

Column 6: FAC = Frequency analysis of codes, FAS = Frequency analysis of sequences, FAP = Frequency analysis of parts of sequences

Source: van der Zouwen, J and Smit, J. (2002), The Diagnostic Approach: Evaluating Survey Questions by Analyzing Patterns of Behavior Codes and Transcripts of Question –Answer Sequences, Invited paper presented at the International Conference on Questionnaire Development, Evaluation, and Testing Methods, Charleston, N.C., November, 2002. (Note that a simplified version of the table is found in van der Zouwen, J and Smit, J.H. (2004), Evaluating Survey Questions by Analysing Patterns of Behaviour Codes and Question-Answer Sequences: A Diagnostic Approach, Presser et al (eds), *Methods for Testing and Evaluating Survey Questionnaires*, Hoboken, NJ: Wiley.)

Exhibit 6: Example Recruitment Leaflet



National Centre for
Social Research

Asking the right questions: **Can you help us?**

The National Centre for Social Research is an independent charitable research institute, carrying out social surveys among the public – for example

- The National Travel Survey
- The Health Survey for England

The questions we ask in our surveys must be clear and easy to understand.

We are designing and testing some survey questions, and are looking for people to help us.

No special knowledge is needed, and payment will be made, in appreciation of your time.

If you are interested in finding out more please contact:

Exhibit 7: Structuring and Conducting Cognitive Interviews: Some Key Principles

Starting the interview

- Physical conditions and seating arrangements
 - Comfortable, quiet, face-to-face (or at 90 degrees), not too close, out of direct sunlight
- Introduction to the study
 - Who's doing the study
 - It's purpose
 - Assure confidentiality
 - Etc.
- Explain reason for tape recording, i.e., so that you can be fully present to what the respondent says
- Explain that the interview will take no more than 1 ½ hours
- Check if respondent has questions

Role of the respondent and interviewer

- Explain what you want the respondent to do – want to know detail of thought processes
- May seem unnatural to vocalise what is often subconscious process
- Reassure respondent that this is not a 'test' of him/her, but a test of the questionnaire
- Encourage respondent to voice criticism – "I didn't write these questions, so feel free to criticise them – my job is to find out what's wrong with them"
- Train the respondent to think aloud
- Probes should be clear, open-ended, non-leading
- Avoid 2 questions in one
- Be an attentive listener
- Do not assume
- Be non-judgmental
- Allow time for the respondent to reply
- Do not put words in the respondent's mouth
- Encourage and reassure
- Look for non-visual cues, e.g., confusion, irritation
- Keep short, clear notes

Ending the interview

- Give notice that you are approaching the end
- End on a positive note
- Thank respondent, stress use and value of interview
- Re-affirm confidentiality
- Give respondent time to 'come out' of interview mode especially if sensitive or emotive area

Willis, G.B. (1994), *Cognitive Interviewing and Questionnaire Design: A Training Manual*, Washington, DC: Office of Research Methodology, National Center for Health Statistics.

Exhibit 8: Other Techniques Used on Cognitive Interviews

Paraphrasing - Designed to assess question comprehension and interpretation by asking participants to repeat the question using their own words. For many respondents this can be a very useful technique as it clarifies implicit assumptions made by respondents (or researchers). But it is not useful for all respondents. For some respondents this task can be very stressful and demanding if they don't really understand what the question is asking or can't articulate this. It also has the potential to effect subsequent responses as the participant may start to attend more closely to the meaning of the questions (Caspar, 2004).

Rating tasks - Participants are asked to rate items along a specific dimension such as sensitivity, difficulty recalling information, confidence in response, willingness to report, etc. Users of respondent debriefing questions are often sceptical of these tasks as they can be sensitive tasks and suffer from the same problems as such respondent debriefing questions do – See Section 3.3 on Respondent Debriefing in the Question Testing Chapter.

Response latency - Measures are taken of the time elapsed between question presentation and response formation. It assumes that longer response latency reflects a more difficult response task (see Bassili, 1996). It is useful to note that response latency can also reflect other tendencies. For example, one of the key indicators of Type A coronary behaviour is a lack of response latency in interviewed individuals (Rosenman, 1978). A strength of response latency measurement is that it is unobtrusive. A weakness is that it requires special timing equipment unless qualitative timing is used (Caspar, 2004).

Qualitative timing - response latency measurement with impressionistic timing.

Free-sort and dimensional-sort classification tasks – These are based on studies about cognition and categorisation (see Rosch, 1975; Rosch and Lloyd, 1978; Neisser, 1987) and are used to explore the natural taxonomies into which people groups lists of items (which could be objects such as consumer items, single words, hypothetical scenarios, etc.) In a “free-sort”, for example, respondents sort lists of items into groups that “seem to go together”. In a “dimensional sort”, respondents are asked place the items along a particular pre-specified dimension or dimensions.

Exhibit 9: Keeping Respondents Thinking Aloud Most respondents will need encouragement to report their thoughts, since it is not naturally done in conversation.

- Assure them that there are no “right” or “wrong” answers; that you just want to know what they are thinking.
- If they are “thinking aloud” well, you need do nothing but listen and observe. Jot down a few notes about instances to revisit later in the interview.
- Respondents may go silent for a moment. Pause for a moment as well.
 - If they do not start thinking aloud again. Gently remind them to “REMEMBER TO TELL ME YOUR THOUGHTS.”
 - If they go silent and look puzzled or curious, try “YOU LOOK PUZZLED (CURIOUS). TELL ME WHAT YOU ARE THINKING.”
- Be sure to give positive feedback to respondents who are thinking aloud well. “I APPRECIATE THE EFFORT YOU’RE MAKING TO RECALL THIS INFORMATION.”
- Don’t suggest responses.
 - Most of the time when the respondent answers immediately, the answer was immediately accessible and there will not be intervening thoughts or images to report.
 - However, you should make notes to ask about some of these to see if the respondent is recalling events directly or using some rule, such as “I never buy dresses” or “We buy the paper every Friday and Sunday”. You can then say something like: “YOU ANSWERED QUESTION (X) VERY QUICKLY. WHY WAS IT SO EASY FOR YOU TO COME UP WITH THE ANSWER?”

Source: Adapted from training material for workshop in cognitive interviewing at the US Census Bureau led by Judith Lessler, Research Triangle Institute, late 1980’s

10.3.5.c Special techniques

Exhibit 10: Examples of Specific Probes

Comprehension probes

- What does X mean to you?
- In your words, what is X?

Recall / Judgment probes

- How do you remember that?
- Did you have a particular time period in mind?
- How did you calculate your answer?
- Did you try to count each time you (did X), or did you make an estimate?

Response probes

- How did you feel about answering this question?
- Did you find this question embarrassing to answer? *
- Do you think some people might find this question too personal?
- Did you have any difficulty selecting the appropriate answer category?

Confidence judgment probes

- How well do you remember this? *
- How sure of your answer are you? *

Source: Material by D. Collins from Centre for Applied Social Surveys (CASS) Course 2002 on “Pretesting Survey Questionnaires” conducted by Campanelli, Collins, and Thomas.

*May be problematic as respondent debriefing questions of this type are problematic.

10.3.5.g Practice

Exhibit 11: Think-Aloud Cognitive Interviewing Practice Exercises

Instructions

There are 9 exercises overall. The first three are from interview surveys and pre-prepared probes are supplied for you. The next three are from self-completion surveys and you need to create your own probes. The last three are again from interview surveys and you need to create your own probes.

The exercises work well when 3 people practice them together with one person playing the role of the interviewer, one the respondent and one the observer and swapping roles for each exercise. It's the observer's role to give feedback to the interviewer. If it is not possible to have an observer, make sure that you tape-record the session.

Each of the exercises have a short "brief" for the interviewer that gives some background on the question(s) and known problems. **THIS SHOULD NOT BE SHOWN TO THE RESPONDENT!** In addition, if it is a question for an interview survey, the respondent should only be read the question! Respondents should not be allowed to see the question. If it is a question from a self-completion survey, although the respondent should not see the briefing page, you will need to hand the separate self-completion page to him/her.

Your goal in all of these exercises is to do a concurrent think-aloud where the respondent thinks aloud while answering the interview survey question or while filling in the form. Remember that for think-alouds for self-completion, the respondent should say out loud what they are reading as well as what they are thinking. Remember to let the respondent finish his or her think-aloud before coming in with pre-prepared or spontaneous probes. The exception would be instances where the respondent goes prematurely silent and needs to be reminded to think aloud.

It is helpful to be aware that some common problems for new interviewers are

- Interrupting the respondent with a specific probe in the middle of their think-aloud
- Pushing respondents to come up with an answer to the survey question, rather than allowing them to continue their think-aloud
- Getting the timing right for when to encourage the respondent to continue to think aloud
- Probing thoroughly, but not over doing it!
- Allowing the respondent to fall into a roll where he/she keeps asking the interviewer questions rather than simply thinking aloud. For example, if the respondent asks, what does "area" mean in this question. Rather than providing an answer to this question, the interviewer needs to ask the respondent about the different interpretations he/she has and say that is just the kind of information we are looking for.

Exhibit 11: (continued)

Some Possible Preambles for the Exercises

My name is [your name] and I'm a researcher from [name of organisation].

(in a real interview, you would then briefly describe your organisation)

Before we start, I just want to explain what we are doing here today. As we said in the letter, [name of organisation] is preparing for a new survey, but before we start, we are testing out some of the questions.

(you would normally say more about the research: who it is for, what it is about, and mention confidentiality)

INTERVIEW: THINK-ALOUD

When I read out the question, I want you to say, out loud, the thoughts that come into your mind when you hear the question – just say out loud whatever you are thinking.

(normally you would do a demonstration, or get them to practice thinking aloud)

OR

SELF-COMPLETION: THINK-ALOUD

Here's a pen, and a page from the questionnaire. What I'd like you to do is to fill in the questionnaire, and at the same time, tell me what you are thinking. So just say out loud what you are thinking and reading as you go through the questionnaire and put in your answers.

(see above – comments on demonstration)

I will be tape-recording the interview (show recorder), because this saves me having to take detailed notes and I can pay full attention to what you are saying.”

START TAPE RECORDER.

Exhibit 11: (continued)

**Exercise 1:
Think-Aloud Interviewing with Pre-prepared Probes
“Abdomen”**

Briefing (FOR THE INTERVIEWER ONLY): The question is from a survey of health (see Willis, 1994). Our concerns:

- Are people familiar with the term “abdomen”?
- How vague is the phrase “pain in the abdomen”?
- Does it have a specific meaning for them?
- Are they really thinking back over “the last year”, when thinking about their answer?
- If so, is that the last 12 months, or since January, or some other reference point?

“In the last year have you been bothered by pain in the abdomen?”

Yes
No

PRE-PREPARED PROBES
(USE ONLY IF NOT COVERED IN THINK ALOUD):

- a) Why do you say (no) / (yes)?
- b) What, to you, is your abdomen?
- c) What does it mean to be “bothered by pain”?
- d) What period of time are you thinking of here, specifically?

Exhibit 11: (continued)

**Exercise 2:
Think-Aloud Interviewing with Pre-prepared Probes
“News Programmes”**

Briefing (FOR THE INTERVIEWER ONLY): The question is from a survey of television viewing. It asks a complex task of the respondent. First R has to calculate how many hours of evening TV they watch, then calculate how many hours of evening news programmes they watch, and then calculate the fraction! In addition, no reference period is given in the question.

Belson (1981) found that only $\frac{1}{4}$ of Rs interpreted ‘proportion’ as ‘part’, ‘fraction’, or ‘percentage’. About a $\frac{1}{3}$ saw it a quantitative. . . ‘how long’, ‘how many hours’, ‘how often’. A larger group tapped other dimensions entirely . . . ‘when they watched’, ‘which programmes’, even ‘which channel’.

“What proportion of your evening viewing time do you spend watching news programs?” ENTER PROPORTION

PRE-PREPARED PROBES

(USE ONLY IF NOT COVERED IN THINK ALOUD)

- a) How did you arrive at your answer?
- b) Over what period were you thinking?
- c) What do you consider to be “evening viewing time”?
- d) What do you consider to be “news programs”?
- e) Could you please rephrase the question in your own words?

Exhibit 11: (continued)

**Exercise 3:
Think-Aloud Interviewing with Pre-prepared Probes
“Electricity and Water Costs”**

Briefing (FOR THE INTERVIEWER ONLY): The question is one adapted from the U.S. Study of Family Economics as described in Sudman, Bradburn, & Schwarz (1996, p. 164). We are concerned that some people may have difficulty remembering the details of the various costs. In addition, how do they go about adding them together?

“About how much did electricity and water cost you last year?”

ENTER AMOUNT

PRE-PREPARED PROBE
(USE ONLY IF NOT COVERED):

a) Please tell me in detail how did you arrived at your answer?

Exhibit 11: (continued)

**Exercise 4:
Think-Aloud Self-completion with Your Own Probes
“British Social Attitudes Page”**

Briefing (FOR THE INTERVIEWER ONLY): This page is from a self-completion questionnaire that was incorporated within an interview survey (for one year of the British Social Attitudes Survey, conducted by the UK National Centre for Social Research). An examination of the completed self-completion questionnaires showed that respondents were negatively influenced by the format, with the most common answer having boxes 1 or 2 marked in addition to boxes 4 or 5. You will need to observe if and how your respondent is being influenced by the format. Precisely what aspects of the format are causing the problem?

Exhibit 11: (continued)

A2.41 Here are a number of opposite statements.

For each pair, first of all decide which one you agree with more.

Then tick a box to say if you 'agree strongly' with the statement, or 'just agree'.

If you don't agree with either statement, tick the middle box.

	This statement	I agree with:	OR	This statement
a.	Ordinary people get their fair share of the nation's wealth	Don't agree with either statement		A few rich people get too big a share of the nation's wealth
	Strongly agree Just agree			Just agree Strongly agree
	<input type="checkbox"/> 1 This <input type="checkbox"/> 2 ment	I agree <input type="checkbox"/> 3 with:		This <input type="checkbox"/> 4 ement <input type="checkbox"/> 5
b.	There is no need for strong trade unions to protect employees' working conditions and wages	Don't agree with either statement		Employees will never protect their working conditions and wages without strong trade unions
	Strongly agree Just agree			Just agree Strongly agree
	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 3		<input type="checkbox"/> 4 <input type="checkbox"/> 5

Exhibit 11: (continued)

**Exercise 5:
Think-Aloud Self-completion with Your Own Probes
“Paired Comparisons”**

Briefing (FOR THE INTERVIEWER ONLY): This page is adapted from a self-completion questionnaire that was incorporated within an interview survey for a London housing association. Residents were first contacted with a focus group to generate a list of things that they wanted to see improved. These have then been randomly paired. This task differs from ordinary semantic differential questions where the pairs are complete opposites. The organisers of the current method see it as a way to rank respondent's priorities without asking for a complete ranking.

Our concern is that the randomisation creates pairs that are difficult to compare. Have your respondent pretend that he/she is a tenant of the housing association. Are the initial instructions clear? Does the respondent look at them thoroughly? Is the respondent feeling confused or frustrated? Does the respondent believe the exercise is pointless? How frustrated is the respondent? Is the respondent tempted to opt out through ticking the middle box, refusing to proceed, etc?

Exhibit 11: (continued)

Please read these instructions carefully

The next page contain ideas for improvement which have been given to us by customers.

We would like to know how important you think they are.

To help you compare them, all the ideas are arranged in pairs. For each pair, please put a cross in ONE box to show which of the two is more important to you, like this:

Faster response
to enquiries

Staff to be
more courteous

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
This side very much more important	This side quite a lot more important	This side a little more important	Both sides just as important or unimportant	This side a little more important	This side quite a lot more important	This side very much more important

This example would show that you felt much more important than a faster response to enquiries.

You will see that each idea appears three times, but all the pairs are different and we need to know how you rate all of them.

Important: Please put only one cross in a line of boxes.

If you feel the same about both ideas in a pair, put your cross in the middle box.

What can XXX Housing Group do to improve its services for you? Important:

Place a cross in ONLY ONE box on each line

This side very much more important	This side quite a lot more important	This side a little more important	Both sides just as important or unimportant	This side a little more important	This side quite a lot more important	This side very much more important
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Customers' Ideas

Listen more

Customers' Ideas

Staff to be more helpful

Check that all repairs are being done properly

Get repair jobs done quicker

Spend more time with us when we move in

Check new tenants more carefully before moving them in

Respond more quickly to complaints

Staff to be available at more convenient times including evenings and weekends

The closer you put your mark to an idea, the more important it is to you

Exhibit 11: (continued)

**Exercise 6:
Think-Aloud Self-Completion with Your Own Probes
“Relationship Grid”**

Briefing (FOR THE INTERVIEWER ONLY): The question is from a UK test census prior to the 2001 UK census. The aim is to be able to collect the relationship of each person in the household to all other household members, not only to Person 1. We want to know whether people are able to complete the relationship grid correctly. How do they decide the order in which to list the people in their household? Do they understand how the grid works? Is the example helpful?

Exhibit 11: (continued)

Relationship within the household	Name of Person 1	Name of Person 2	Name of Person 3	Name of Person 4
	John Smith	Mary Smith	Alison Smith	Steven Smith
<p>▶ Write the name of each person in the space at the top of the columns. Start with person 1, who should be the head of the household.</p> <p>▶ Tick a box to show the relationship of each person in your household to each of the other people.</p> <p>▶ The example opposite shows how to complete the relationship table for John Smith, living with Mary (his wife) and Alison and Steven (their two children).</p>		▶ Relationship to person number 1	▶ Relationship to person number 1 2	▶ Relationship to person number 1 2 3
		Husband or wife <input checked="" type="checkbox"/>	Husband or wife <input type="checkbox"/> <input type="checkbox"/>	Husband or wife <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		Living as a couple <input type="checkbox"/>	Living as a couple <input type="checkbox"/> <input type="checkbox"/>	Living as a couple <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		Natural or adopted child <input type="checkbox"/>	Natural or adopted child <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Natural or adopted child <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
		Brother or sister <input type="checkbox"/>	Brother or sister <input type="checkbox"/> <input type="checkbox"/>	Brother or sister <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>

Exhibit 11: (continued)

**Exercise 7:
Think-Aloud Interviewing with Your Own Probes
“Drugs”**

Briefing (FOR THE INTERVIEWER ONLY): This question is for an attitudinal survey. One worry is that the statement may not be very easy to comprehend, so to explore this, we want to know how respondents might put it in their own words. Also, what drugs do respondents have in mind when considering their answer?

I’m going to read out a statement about illegal drugs, such as cannabis, cocaine and heroin. Please say if you agree or disagree with it.

**Doctors must be allowed to prescribe drugs for those what are addicted to them.
Do you agree or disagree?**

Agree

Disagree

Exhibit 11: (continued)

**Exercise 8:
Think-Aloud Interviewing with Your Own Probes
“Walking”**

Briefing (FOR THE INTERVIEWER ONLY): This question is for a health survey. Walking is such a basic activity that we wonder if people might have difficulty bringing it to mind, for the purpose of measurement. Did they think back over the last 4 weeks (if so, how?), or use some other recall strategy? And we want to know how they interpret “continuous” walking.

I'd like you to think about all the walking you have done in the past 4 weeks either locally or away from here. Please include any country walks, walking to and from work and any other walks that you have done.

Have you done any walks of a quarter of a mile or more in the past 4 weeks? That would usually be continuous walking lasting 5-10 minutes?

Yes
No

Exhibit 11: (continued)

**Exercise 9:
Think-Aloud Interviewing with Your Own Probes
“Television”**

Briefing (FOR THE INTERVIEWER ONLY): This question was commissioned by a broadcasting agency. We are particularly interested in how respondents interpret the question. What age group of children are they thinking of? What types of violence were they thinking of, and in what kind of programmes? What impact, if any did the last phrase “apart from ordinary westerns” have on the way the respondent answered?

“Do you think that children suffer any ill effects from watching programmes with violence in them, other than ordinary westerns?”

Yes

No

10.3.5.h Writing notes

Exhibit 12: Making Notes for Analysis, Early UK National Centre Example

During the interview:

- Don't take extensive notes. This will distract you from listening to what the respondent is saying. You must give the respondent your full attention, or you'll miss important clues.
- The most you should do is job down a few important points with keywords

After the interview: Make notes immediately (or very soon afterwards). Don't wait, and definitely don't do another interview in between. You may want to unwind; take a break; go for a stroll: **FIRST, WRITE THE NOTES!**

- If at all possible, play the tape as you do so.
- It is usually best to write notes directly on the questionnaire. Use a blank questionnaire as a master, and write notes from all interviews on the master, being careful to label which notes came from which interviews. This offers the simplest way to review them all back in the office.
- Keep it very short and simple. Reams of information are not helpful. You don't have to give a detailed description of events. Just brief phrases that summarise the main points. No verbatim speech!

Checklist of key things to write down: Comprehension: Where respondents are not interpreting the key concepts and questions as intended

- Where respondents request clarification, e.g., over the meaning of words and phrases, whether or not they should include something, etc.

Recall / Judgment: Where respondents do not have access to the information that the question asks for

- Where respondents have difficulty remembering the needed information
- Where respondents are using a judgment shortcut

Response: Where the question lends itself to a socially desirable answer

Checklist of key things to write down (CONTINUED): Other:

- Where the question doesn't cover all circumstances
- Where the respondent interrupts you before you've reached the end of the question.
- Where there are other indications that the question is too long.
- Where the question is difficult for you to read
- Important respondent behaviour, e.g., R doesn't really listen – just looks at the card and figures out which response applies
- Observations about routing, e.g, should we skip E and F over a certain age?
- Responses to any standard (i.e., scripted) probes

And finally . . .

- Always be alert to possible solutions to a problem! These might emerge from the respondent or you might think of them
- (Note that directly asking the respondent to do it for you, e.g., asking the R, "How else do you think we could put this question?", is not a very useful approach for general population respondents)
- The cognitive interview is a flexible forum. You may be able to try out alternative question wording, where the original has failed

10.3.5.h Writing notes **Exhibit 13: Example of Taking Notes from Willis (1994)**

SECTION D: OCCUPATIONAL SAFETY AND HEALTH

ITEM T1:

During the past 2 weeks, did you work at any time at a job or business not counting work around the house? (Include unpaid work in the family (farm/business).)

THIS IS A REALLY TECHNICAL AND COMPLEX WAY TO ASK WHETHER THEY HAVE WORKED IN THE PAST TWO WEEKS

a. Altogether, does your employer have 50 or more employees?

S#3: HOW IS >1 JOB HANDLED?

2a. Does your employer have an official policy that restricts smoking in any way?

S#3: THE EMPLOYER DOESN'T, BUT THE BUILDING OWNER DOES.

3. Does your employer offer a quit smoking program or any other help to employees who want to quit smoking

1[] Yes

2[] No

3[] DK

S#1: DO WE MEAN A PROGRAM PAID FOR BY THE EMPLOYER HERE? THIS WAS UNCLEAR.

5. Which of these exercise programs are made available to you by your employer?

S#1: THE TERM "MADE AVAILABLE" IS VAGUE.

1[] Walking group

2[] Jogging/Running group

3[] Biking/Cycling group

4[] Aerobics classes

5[] Swimming classes

6[] Non-aerobic exercise classes

7[] Weight lifting classes

8[] Fully paid membership in a health/fitness club

9[] Partially paid membership in a health/fitness club

10 [] Physical activity or exercise competitions

98 [] Other – Specify

00 [] No programs

99 [] DK

S#3 IS INVOLVED IN A "WELLNESS PROGRAM". WHERE DOES THIS FIT IN?

IF NO PROGRAMS OR DK, GO TO 6A.

Source: Willis, G.B. (1994), *Cognitive Interviewing and Questionnaire Design: A Training Manual*, Washington, DC: Office of Research Methodology, National Center for Health Statistics.

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Web material accompanying *The International Handbook of Survey Methodology*

Suggestion for further reading

Cognitive Interviewing

Campanelli, P. (1997). Testing survey questions: New directions in cognitive interviewing. *Bulletin de Methodologie Sociologique*, 55, 5-17 (also on this book's website, chapter 10).

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