6th GESIS Summer School in Survey Methodology  
Cologne, August 2017  

Syllabus for Course 5: "Questionnaire Design"

Instructors:  
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Date: August 14-18, 2017  
Time: 09:00-13:00, 14:00-16:00  
Course starts Monday morning at 09:00

About the Instructors:

Prof. Dr. Marek Fuchs is full professor for social science research methods at Darmstadt University of Technology, Germany. He obtained his PhD from Kassel University in 1993 and conducted post-doctoral work at the University of Michigan, Ann Arbor (USA). Since then, he has been the principal investigator of several large scales surveys. His methodological research is particularly concerned with methodological aspects of survey measurement. Over the course of the past 25 years, he has published on laboratory and field-experimental studies concerning questionnaire design for face-to-face surveys, telephone surveys and self-administered surveys (paper & pencil as well as web surveys). He has a long standing experience in teaching courses on survey methodology at the PhD and Master levels to an international audience.

Dr. Tanja Kunz is researcher at GESIS Department Monitoring Society and Social Change since May 2017. Previously, she worked as a research associate in social science research methods at Darmstadt University of Technology (Germany) since 2010. Her main research interest focuses on improvement of data quality by experimental survey design, in particular by visual design in Web surveys.

Dipl.-Soz. Anke Metzler is a research associate in social science research methods at Darmstadt University of Technology (Germany) since 2014. Her main research interest focuses on non-response and measurement issues related to (mixed device) Web surveys.

Selected Publications:

Short Course Description:
Briefly speaking, a respondent’s answer can only be as good as the question being asked. Thus, an effective questionnaire is a key component of a survey contributing to overall data quality. In addition to an overview of theoretical principles underlying questionnaire design this course particularly aims at providing evidence-based practical advice on how to design good survey questions and questionnaires. Based on field-experimental studies evaluating various aspects of questionnaire design participants will acquire state of the art knowledge concerning questionnaire design. The course offers the opportunity to apply these competencies under the supervision of the lecturers in group exercises and assignments. The course will strengthen the, participants’ ability to design effective survey questions and to integrate them into a meaningful questionnaire.

Keywords:
questionnaires, survey research, measurement

Course Prerequisites:
Basic knowledge in quantitative social science research methods is required; basic knowledge concerning survey design and data quality is advisable. Participants not familiar with the total survey error framework are encouraged to consider the preparatory reading mentioned at the end of this syllabus. There are no statistical prerequisites.

Target Group:
Participants will find the course useful if they:
- plan to or are about to conduct a survey;
- would like to supplement their initial experience in designing questionnaires with practical advice based on a sound theoretical basis concerning the underlying mechanisms.

Course and Learning Objectives:
By the end of the course participants will:
- have an overview concerning the various components of survey data quality in general and questionnaire quality in particular;
- understand the cognitive processes underlying survey measurement for the various survey modes;
- be able to design simple survey questions of various types and to combine them in an integrated survey instrument.

Organizational Structure of the Course:
The four hours of classroom instruction combining lecture and group work are supplemented with two hours of on-site study assisted by the instructors where participants are expected to work on their assignments in due consideration of the stated literature. Additional time of 1-2 hours a day has to be scheduled for reading further course literature.

Software and Hardware Requirements:
Course participants will need to bring a laptop computer to perform the practical exercises in this course. The laptop should have some kind of Office suite/package installed.

Long Course Description:
In traditional text books questionnaire design is typically treated as an "art". Designing questions and questionnaires is broadly described as an important step when planning a survey however little advice is provided on how to phrase individual questions and how to design a good questionnaire as a whole. The rules and instructions given in such texts are either too specifically concerned with particular substantive questions - and accordingly
those rules cannot be generalized to other types of questions - or the advice given is too broad and general and it is left to the reader to apply the general rules to his or her specific survey questions.

This course on questionnaire design will avoid this dilemma. Instead of providing general or specific rules on how to design a good survey question and a questionnaire as a whole, the course will approach the science of questionnaire design by means of two alternative strategies: On the one hand basic concepts relevant to survey measurement will be discussed (e.g. mode differences, question-answer-process, satisficing or social desirability) in order to make participants aware of the mechanisms underlying survey measurement. On the other hand participants will be introduced to results of field-experimental studies testing various aspects of a survey question and a questionnaire as a whole (e.g. question wording, response order or the visual design of a question). The discussion of these studies will highlight the implication of various design aspects of a survey question for the responses provided by respondents.

Thus, the lectures provide scientific background knowledge and educate participants in their professional reasoning when designing survey questions and a questionnaire as a whole. Based on the theoretical concepts and experiments discussed in the lectures, participants will be guided and supported in designing a topical survey questionnaire during practical sessions and by means of assignments. The work on the joint questionnaire starts with a discussion of the key indicators to be measured and continues with the development of a set of corresponding survey questions (including all most prevalent question types). Finally the questions will be combined into a questionnaire and tested. During the time allotted to assignments (2 hours a day, work on assignments) instructors will be available for questions and discussion and provide individual feedback. Assignments will be discussed in the course sessions. During these practical sessions instructors are also available for questions concerning the participants’ individual questionnaires. Participants should be prepared to spend an additional 1-2 hours a day reading articles and papers made available by the instructors. The questionnaire in the practical session will be developed using Office software; no specialized software package will be used.

The course will be applicable to surveys of individuals and households. The course is not restricted to a specific survey mode.

**Day-to-day Schedule and Literature:**

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<thead>
<tr>
<th>Day</th>
<th>Topic(s)</th>
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<tbody>
<tr>
<td>1</td>
<td>Round of introduction (participants and lecturers)</td>
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<td></td>
<td>Administrative issues</td>
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<td></td>
<td>Introduction, presentation of research questions for the assignments</td>
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<td></td>
<td>Introduction to the Total Survey Error framework</td>
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<td></td>
<td>Translating theoretical concepts into proper indicators</td>
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<td></td>
<td>Exercise: Development and selection of an indicator</td>
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<td></td>
<td>Survey modes</td>
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<td></td>
<td>Question answer process</td>
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<tr>
<td></td>
<td>Group Assignment: Finding indicators for your research question</td>
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**Compulsory reading:**


**Literature for the assignment:**

### Wording of attitude questions and response categories
- **Compulsory reading:**

### Response errors in attitude questions (I)
- **Compulsory reading:**

### Group Assignment: Designing a matrix question
- **Compulsory reading:**

### Behavioral frequency questions (open, closed)
- **Exercise:** Designing behavioral frequency questions
- **Compulsory reading:**

### Dealing with social desirability and asking sensitive questions
- **Group Assignment: Designing sensitive questions
- **Compulsory reading:**

### Group Assignment: Designing sensitive questions
- **Compulsory reading:**

### Exercises
- **Exercise:** Improving the visual design of questions
- **Compulsory reading:**

### From questions to a questionnaire
- **Pre-test methods
- **Assignment:** Conducting a pre-test

### Compulsory reading:

### Suggested reading:

### Literature for the assignment:

### Mixed-mode surveys and uni-modal design
- **Compulsory reading:**
Preparatory Reading:

Additional Recommended Literature:
This article offers a comprehensive overview concerning the design of attitude and behavior questions:

The following text books offer a comprehensive introduction to the cognitive processes underlying survey measurement: