GESIS Summer School in Survey Methodology 2022

Syllabus for course:
“Design and Implementation of Web Surveys”

Lecturers: Christopher Antoun Frederick Conrad Florian Keusch
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Date: 15-19 August 2022
Time: 11:00-13:00 | 14:00-18:00
Venue: Online via Zoom

About the Lecturers:
Christopher Antoun is an Assistant Research Professor at the College of Information Studies (iSchool) and Joint Program in Survey Methodology (JPSM) at the University of Maryland. His research focuses on using smartphones to collect population data, either through text messaging, mobile questionnaires, or apps and sensors. Before coming to UMD, Chris obtained his PhD in Survey Methodology from the University of Michigan and was a postdoctoral fellow at the U.S. Census Bureau. He is currently an associate editor for the Journal of Survey Statistics and Methodology and a member of the advisory board for the International Program in Survey and Data Science.

Frederick Conrad is a survey methodologist who explores and evaluates new methods of collecting data for social research. His current research includes a study of video technology for survey interviews and a study of social media’s potential for measuring trust in government statistics. With Tourangeau and Couper he co-authored The Science of Web Surveys (2013) and with Schöber he co-edited Envisioning the Survey Interview of the Future (2008). He is a research professor in the Michigan Program in Survey and Data Science which he also directs and is a professor in the Psychology Department, both at the University of Michigan.

Florian Keusch is Professor of Statistics and Methodology (interim) in the Department of Sociology at the University of Mannheim and Adjunct Assistant Professor in the Joint Program in Survey Methodology (JPSM) at the University of Maryland. He currently serves on the board of the German Society for Online Research (DGOF) and is Associate Editor of Public Opinion Research and Survey Research Methods. His research focuses on nonresponse and measurement error in Web and mobile Web surveys, passive mobile data collection, and visual design effects in questionnaires.

Selected Publications:
Course Description:
This course introduces students to the design and implementation of online survey data collection instruments. The course is both hands-on and conceptual. It begins by discussing what is unique about web surveys and when their use is most appropriate, followed by an introduction to survey errors that can affect the quality of web survey data. Small groups of students will each develop a research problem and a questionnaire to address their problem, designed for online administration. They will pretest the question wording, program the questionnaire using a web survey development platform (no programming experience is required), and assess users’ (respondents’) experience while interacting with the web-based instrument. Students will also develop basic plans for data collection. Finally, each group will present its problem, online questionnaire, evaluation, and plans to the rest of the class.

Keywords:
web surveys; online data collection; survey methodology; questionnaire design

Course Prerequisites:
- Some familiarity with survey research.
- Plans to use a web survey in a project is helpful but certainly not essential.

Target Group:
Participants will find the course useful if:
- Anyone (whether in government, business, academia, or non-profit organizations) who wants to collect survey data online can benefit from this course.
- This includes people who are new to web surveys but also people who have used web surveys in the past but feel that they need to improve the design of their surveys.

Course and Learning Objectives:
By the end of the course participants will:
- understand what should go into creating a web-based questionnaire.
- be able to weigh the pros and cons of different web questionnaire features.
- have implemented a functioning web survey instrument.
- be able to evaluate survey questions and their usability in an online questionnaire.

Organizational Structure of the Course:
Each day will consist of about 4 hours of lecture and discussion on various aspects of Web survey design, and 2 hours of lab including demonstrations and hands-on experience, implementing group projects in a web survey development platform (Qualtrics or LimeSurvey). The instructors will be available for individual and group consultations on participants’ projects and provide support in designing and implementing a web survey during the course.
Software and Hardware Requirements:
Participants will develop a web survey instrument using a web survey platform. Each group can decide to use either the Qualtrics or LimeSurvey platform. Students will need to use a laptop for participating in the online lectures (via Zoom) and for the exercises using Qualtrics or LimeSurvey.

Day-to-day Schedule and Literature:

<table>
<thead>
<tr>
<th>Day</th>
<th>Topic(s)</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction to web surveys (Conrad); Samples and representation (Antoun); Lab 1 (Identify research question and target population); Group presentations of research questions</td>
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<tr>
<td></td>
<td>Required reading (have to be read before class):</td>
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<tr>
<td></td>
<td>Suggested reading (suggested, yet do not have to be read before class):</td>
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<td>2</td>
<td>Writing effective survey questions (Keusch); Lab 2 (Formulate survey questions); Basic building blocks of web survey questionnaires (Antoun); Interactivity in web surveys (Conrad)</td>
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<tr>
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<td>Required reading:</td>
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<td></td>
<td>Suggested reading:</td>
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<tr>
<td>3</td>
<td>Group presentations of questionnaires; Visual and multimodal aspects of web survey design (Conrad); Programming the questionnaire (Antoun); Lab 3 (Program questionnaire in either Qualtrics or Lime Survey)</td>
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<td>Required reading:</td>
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<td>Suggested reading:</td>
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### Lab 4

**Lab 3 continued; Questionnaire evaluation and user experience (Conrad); Lab 4 (Evaluate questionnaire); Recruiting participants (Antoun)**

**Required reading:**

**Suggested reading:**

### Lab 5

**Lab 5 (Develop recruitment plan); Data preparation and processing (Antoun); Paradata (Keusch); Ethical considerations (Conrad); Group presentations**

**Required reading:**

**Suggested reading:**

**Preparatory Reading:**

**Additional Recommended Literature:**

None