

Syllabus

Web Survey Methodology and Online Panels with practical survey programming 2 credits/4 ECTS

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February 19 – April 09, 2021

Short Course Description

The course introduces the students to the fundamental concepts of web surveys and online panels. The course is organized in three main sections which follow the way a proper web survey is organized: pre-fielding, fielding, and post fielding.

Course Objectives

By the end of the course, students will...

- know if a web survey is appropriate for the target population of a research project
- be able to manage the entire process of collecting data via a web survey
- have the mental tools to design a questionnaire to be fielded online
- have a better understanding on online panels and how to use them
- know where to find answers to questions related to web surveys and online data collection
- learn what aspects of web surveys still deserve more research
- learn how to program a web survey

The last two weeks of the course are reserved for the students to program and field (to the other students) a web survey using a web survey platform. The students can choose one of three software tools for this task: Qualtrics, LimeSurvey or 1KA. Free licenses were kindly offered by Qualtrics and 1KA for the duration of the course and LimeSurvey can be used for free to collect 25 survey completes per month.

Prerequisites

SURV 400 Fundamentals of Surveys and Data Science or
SURV 623 Data Collection Methods or
Permission from instructor due to demonstrated knowledge of total survey error

Class Structure and Course Concept

This is an online course, using a flipped classroom design. It covers the same material and content as an on-site course but runs differently. In this course, you are responsible for watching video-recorded lectures and reading the required literature for each unit prior to participating in mandatory weekly one-hour online meetings where students have the chance to discuss the materials from a unit with the instructor. Just like in an on-site course, homework will be assigned and graded and there will be a final exam at the end of the course.

Although this is an online course where students have more freedom in when they engage with the course materials, students are expected to spend the same amount of time overall on all activities in the course – including preparatory activities (readings, studying), in-class-activities (watching videos, participating in online meetings), and follow-up activities (working on assignments and exams) – as in an on-site course. As a rule of thumb, you can expect to spend approximately 3h/week on in-class-activities and 9 hours per week on out-of-class activities (preparing for class, readings, assignments, projects, studying for quizzes and exams). Therefore, the workload in all courses will be approximately 12h/week. This is a 2-credit/4-ECTS course that runs for 8 weeks. Please note that the actual workload will depend on your personal knowledge.

Mandatory Weekly Online Meetings

Fridays at 6:00 PM CET (12:00 PM EST), starting 19 February 2021

(Note that daylight saving time begins in the US on March 14, 2021 and clocks are turned forward 1 hour. Daylight saving time begins in Europe on March 28, 2021.)

Meetings will be held online through Zoom. Follow the link to the meeting sessions on the course website on mannheim.instructure.com. If video participation via Internet is not possible, arrangements can be made for students to dial in and join the meetings via telephone.

In preparation for the weekly online meetings, students are expected to watch the lecture videos and read the assigned literature before the start of the meeting. In addition, students are encouraged to post questions about the materials covered in the videos and readings of the week in the forum before the meetings (deadline for posting questions is two days before the online meetings, i.e. on Wednesday each week).

Students have the opportunity to use a different Zoom meeting room to connect with peers outside the scheduled weekly online meetings (e.g., for study groups). Detailed information is posted on the course page in Canvas. Students are encouraged to post the times that they will be using the room to the course website forum to avoid scheduling conflicts. Students are not required to use Zoom and can use other online meeting platforms, such as Microsoft Teams, Google Hangout or Skype.

Grading

Grading will be based on:

- 6 homework assignments (worth 60%)
- Participation in the weekly online meetings (10% of grade): engagement in discussions during the meetings and submission of questions to the weekly discussion forums
- Final Exam (30% web survey programming)

Each assignment will be due three days after the corresponding online meeting. Deadline is on each Monday starting with 22 February 2021 11:30 PM CET (5:30 PM EST). Exact dates are indicated in the syllabus and on the Canvas page. Extensions will be granted sparingly and are at the instructor's discretion.

<i>A+</i>	<i>100 - 97</i>
<i>A</i>	<i>96 - 93</i>
<i>A-</i>	<i>92 - 90</i>
<i>B+</i>	<i>89 - 87</i>
<i>B</i>	<i>86 - 83</i>
<i>B-</i>	<i>82 - 80</i>
<i>Etc.</i>	

The grading scale is a base scale recommended by the MDM. Variations for grading on a scale are at the discretion of the instructor.

The final grade will be communicated under the assignment "Final Grade" in the Canvas course. Please note that the letter grade written in parentheses in Canvas is the correct final grade. The point-grade displayed alongside the letter grade is irrelevant and can be ignored.

Technical Equipment Needs

The learning experience in this course will mainly rely on the online interaction between the students and the instructors during the weekly online meetings. Therefore, we encourage all students in this course to use a web camera and a headset. Decent quality headsets and web cams are available for less than \$20 each. We ask students to refrain from using built-in web cams and speakers on their desktops or laptops. We know from our experience in previous online courses that this will reduce the quality of video and audio transmission and therefore will decrease the overall learning experience for all students in the course. In addition, we suggest that students use a wire connection (LAN), if available, when connecting to the online meetings. Wireless connections (WLAN) are usually less stable and might be dropped.

Long Course Description

Web surveys appeared soon after the web was launched, at the beginning of the 1990s, and today they are the prevailing mode of survey data collection. With them, it has become very easy to create a survey, almost as simple as writing and sending an email. Correspondingly, sometimes it appears that basic computer literacy is not only the necessary, but also the sufficient skill for conducting a web survey.

However, conducting web surveys raises numerous practical and conceptual questions: Is a web survey suitable for my research problem? How do I recruit respondents from the general population? Can I generalize the obtained results if survey participants come from online social media? How many people can I expect to answer my survey? Which strategy will assure enough cooperation? How much time can a web questionnaire take? Should respondents be forced to answer every question? How do I select the right web survey software? How do I adapt to respondents answering from a smartphone?

There are hundreds of questions like these and competent responses require the understanding of many issues, from changing technologies to various methodological specifics. Very often, there are no simple answers. Common sense alone is not enough for many of these situations.

This course presents a dedicated treatment of web survey methodology, bringing evidence-based and comprehensive insight into all aspects of the web survey process” (Callegaro, Lozar-Manfreda & Vehovar, 2015, p. XI).

By carefully reviewing all the evidence-based research for the three steps to manage a web survey (pre-fielding, fielding, and post-fielding), the students will learn how to run a web survey from the research idea to the final steps of data collection.

To give students practical skills that they can apply right after the class, a web survey programming exercise will be part of the final grade. Thanks to the cooperation of Qualtrics, LimeSurvey and 1KA, the students will be able to program a medium to complex survey using one of two survey platform leaders in the industry.

It is also impossible to talk about web surveys without talking about online panels, online communities, and online pools of respondents. For these reasons, two classes will be dedicated to the latest findings about online panels, their usage and popularity, their strengths and limitations, and how the industry is handling online panels and sample sources.

Practical web survey programming

The students are expected to program a survey of medium complexity using Qualtrics, LimeSurvey or 1KA software tools for web surveys. Please choose one platform and email Vlad Achimescu so he can provide you with a temporarily login to the full version of the software thanks to the generosity of Qualtrics and 1KA. For LimeSurvey you can sign up for a free Pro version of the tool with the number of collected responses limited to 25 per month.

More details of the survey programming exercise are included at the end of the document.

What is important is to choose a survey platform already the first week of class so everything that is being taught can be “translated” into the survey platform of your choice.

Readings

Primary readings will be from the following books:

- Callegaro, Lozar-Manfreda & Vehovar (2015). *Web Survey Methodology*, London: Sage. [Link to the book page](#)
- Dillman, Smyth and Christian (2014). *Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method*, 4th Edition. Hoboken, NJ, US: Wiley. [Link to the book page](#)

Lists of required and recommended readings during the course are provided below for each session.

Academic Conduct

Clear definitions of the forms of academic misconduct, including cheating and plagiarism, as well as information about disciplinary sanctions for academic misconduct may be found at

<https://www.president.umd.edu/sites/president.umd.edu/files/documents/policies/III-100A.pdf> (University of Maryland)

and in the MBS Honor Code, signed at the beginning of the program.

Knowledge of these rules is the responsibility of the student and ignorance of them does not excuse misconduct. The student is expected to be familiar with these guidelines before submitting any written work or taking any exams in this course. Lack of familiarity with these rules in no way constitutes an excuse for acts of misconduct. Charges of plagiarism and other forms of academic misconduct will be dealt with very seriously and may result in oral or written reprimands, a lower or failing grade on the assignment, a lower or failing grade for the course, suspension, and/or, in some cases, expulsion from the university.

Accommodations for Students with Disabilities

In order to receive services, students at the University of Maryland must contact the Accessibility & Disability Service (ADS) office to register in person for services. Please call the office to set up an appointment to register with an ADS counselor. Contact the ADS office at 301.314.7682; <https://www.counseling.umd.edu/ads/>.

Students at the Mannheim Business School should contact the Commissioner and Counsellor for Disabled Students and Students with Chronic Illnesses at http://www.uni-mannheim.de/studienbueros/english/counselling/disabled_persons_and_persons_with_chronic_illnesses/

Course Evaluation

In an effort to improve the learning experience for students in our online courses, students will be invited to participate in an online course evaluation at the end of the course. Participation is entirely voluntary and highly appreciated.

Sessions

Canvas pages for each week, containing video lectures, slides, materials and assignments will be released one week before each video lecture, on Friday.

Assignments are due three days after each online meeting (on Monday). Questions should be posted on the Forum two days before each online meeting (on Wednesday).

Please note that assignments and dates are subject to change. Information (e.g., articles and assignments) posted to the course website supersedes the information noted here.

Week 1: Web surveys, mode and sampling

By the end of this unit, you will know...

- Advantages and limitations of web surveys
- Applications of web surveys
- Mode elaboration
- Mixed modes surveys with a web component
- Sampling for web surveys
- List samples
- Intercept web surveys

Video lecture: available on Friday, 12 February 2021

Online meeting: Friday, 19 February 2021, 6:00 PM CET (12:00 PM EST)

Assignment 1:

- Released: Friday, 12 February 2021
- Due: Monday, 22 February 2021, 11:30 PM CET (5:30 PM EST)

Required readings:

From Sage textbook:

- Chapter 1: Survey Research and Web Surveys
- Chapter 2.1: Mode elaboration
- Chapter 2.2: Sampling

Additional required readings:

- Couper, M. P. (2014). "Is the sky falling? New technology, changing media and the future of surveys". *Survey Research Methods*, 7(3), 145-156.
<https://doi.org/10.18148/srm/2013.v7i3.5751>
- De Leeuw, E. (2018). Mixed-mode: Past, present, and future. *Survey Research Methods*, 12(2), 75–89. Available from <https://ojs.ub.uni-konstanz.de/srm/article/view/7402>

Recommended readings (not mandatory):

- Fricker, R. D. J. (2017). Sampling methods for online surveys. In N. G. Fielding, R. M. Lee, & G. Blank (Eds.), *The SAGE handbook of online research methods* (2nd ed., pp. 162–183). London: Sage. Available from <http://faculty.nps.edu/rdfricke/docs/Online-sampling-chpt-second-edition.pdf>
- De Leeuw, E., & Toepoel, V. (2018). Mixed-mode and mixed-device surveys. In *The Palgrave handbook of survey research* (pp. 51–61). New York: Palgrave. Available from: https://www.researchgate.net/publication/321973068_Mixed-Mode_and_Mixed-Device_Surveys

Week 2: Online panels and convenience samples of internet users

By the end of this unit, you will know...

- How online panels came about
- How online panels are built
- Probability vs. non-probability online panels
- Panel maintenance and type of studies possible for online panels
- Convenience samples of internet users to complete surveys

Video lecture: available on Friday, 19 February 2021

Online meeting: Friday, 26 February 2021, 6:00 PM CET (12:00 PM EST)

Assignment 2:

- Released: Friday, 19 February 2021
- Due: Monday, 1 March 2021, 11:30 PM CET (5:30 PM EST)

Required readings:

- Callegaro, M., Baker, R. P., Bethlehem, J., Göritz, A. S., Krosnick, J. A., & Lavrakas, P. J. (2014). Online panel research: History, concepts, applications and a look at the future. In M. Callegaro, R. P. Baker, J. Bethlehem, A. S. Göritz, J. A. Krosnick, & P. J. Lavrakas (Eds.), *Online panel research: A data quality perspective* (pp. 1–22). Chichester, UK: Wiley. Available from <https://research.google/pubs/pub42493/>
- Henning, J. (2013). Improving the representativeness of online surveys. *Alert Magazine*, (4), 26-30,78. Available from https://bluebook.insightsassociation.org/Alert/Alert_Qtr4_2013.pdf
- Blom, Annelies; Cornesse, C.; Dutwin, David; Krosnick, J.A.; Legleye, Stephane; Pasaek, Josh; Pennay, Darren; Philips, Benjamin; Sakshaug, Joseph; Struminskaya, Bella; Wenz, Alexander; Leeuw, de E. (2019). A review of conceptual approaches and empirical evidence on probability and nonprobability sample survey research. *Journal of Survey Statistics and Methodology*, 8(1), 4–36. Available from <https://doi.org/10.1093/jssam/smz041>

Recommended readings (not mandatory):

- Nunan, D. & Knox, S. (2011). Can search engine advertising help access rare samples? *International Journal of Market Research*, 53 (4), 523-540.
- Brigham, N., Fallig, M., & Miller, C. (2014). The impact of survey routers on sampling and surveys: Unraveling the mysteries of survey-router design and deployment. *Journal of Advertising Research*, 54(4), 381–387.

Week 3: Questionnaires for web surveys and paradata

By the end of this unit, you will know...

- How to think about writing a questionnaire
- The importance of graphics in web surveys
- Computerization of a questionnaire
- Handling Don't Know and Prefer not to answer
- How to test web questionnaires
- Manage a list sample for web surveys
- The kind of paradata you can collect in a web survey

Video lecture: available on Friday, 26 February 2021

Online meeting: Friday, 5 March 2021, 6:00 PM CET (12:00 PM EST)

Assignment 3:

- Released: Friday, 26 February 2021
- Due: Monday, 8 March 2021, 11:30 PM CET (5:30 PM EST)

Required readings:

From Sage textbook:

- Chapter 2.3: Questionnaire preparation
- Chapter 2.4: Technical preparation

Additional required readings:

- Tourangeau, Conrad & Couper (2014). *The science of web surveys*. Chapter 5. The web as a visual medium. Oxford: Oxford University Press.
- Callegaro, M. (2013). Paradata in web surveys. In F. Kreuter (Ed.), *Improving surveys with paradata: Analytic use of process information* (pp. 261–279). Hoboken, NJ: Wiley. Available from https://www.researchgate.net/publication/300663661_Paradata_in_Web_Surveys

Recommended readings (not mandatory):

- Dillman, Smyth and Christian (2014). *Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method*, 4th Edition. Chapter 6: Aural versus visual design of questions and questionnaire. <http://bcs.wiley.com/he->

[bcs/Books?action=resource&bcsId=9087&itemId=1118456149&resourceId=36465&chapterId=103120](https://books.google.com/books?action=resource&bcsId=9087&itemId=1118456149&resourceId=36465&chapterId=103120) (Link to color pictures of chapter)

- McClain, C. A., Couper, M. P., Hupp, A. L., Keusch, F., Peterson, G., Piskorowski, A. D., & West, B. T. (forthcoming). A typology of web survey paradata for assessing total survey error. *Social Science Computer Review*

Week 4: Nonresponse and web surveys management

By the end of this unit, you will know...

- Theories of nonresponse
- Leverage-saliency theory
- Indirect control on nonresponse
- Direct control on nonresponse
- Managing a web survey project
- Fielding a web survey project

Video lecture: available on Friday, 5 March 2021

Online meeting: Friday, 12 March 2021, 6:00 PM CET (12:00 PM EST)

Assignment 4:

- Released: Friday, 5 March 2021
- Due: Monday, 15 March 2021, 11:30 PM CET (6:30 PM EDT)

Required readings:

From Sage textbook:

- Chapter 2.5: Nonresponse strategy
- Chapter 2.6 General management
- Chapter 6.2 Web surveys within the project management framework
- Chapter 3: Fielding

From Wiley textbook:

- Chapter 2: Reducing People's Reluctance to Respond to Surveys.

Additional required readings:

- AAPOR Survey refusals task force report (2014): *Current knowledge and considerations regarding survey refusals* (pages 33-44: Who refuses?). Available from <https://www.aapor.org/Education-Resources/Reports/Current-Knowledge-and-Considerations-Regarding-Sur.aspx>

Week 5: Postfielding & device effects

Daylight saving time begins in the US on 14 March, 2021 and clocks are turned forward 1 hour. Daylight saving time begins in Europe on 28 March, 2021. Therefore, look carefully at the deadlines!

By the end of this unit, you will know...

- Preparing the data to be analyzed
- Exporting and archiving web survey datasets
- Multiple devices and device effects
- How to optimize a web survey in order to be taken from multiple devices
- Survey apps and the future of web surveys

Video lecture: available on Friday, 12 March 2021

Online meeting: Friday, 19 March 2021, 6:00 PM CET (1:00 PM EDT)

Assignment 5:

- Released: Friday, 12 March 2021
- Due: Monday, 22 March 2021, 11:30 PM CET (7:30 PM EDT)

Required readings:

From Sage textbook:

- Chapter 4: Post fielding
- Chapter 5.1: Smartphones, tablets and other devices

Additional required readings:

- Wells, T. (2015). Forum: What market researchers should know about mobile surveys. *International Journal of Market Research*, 57, 521–532.

Recommended readings (not mandatory):

- Mavletova, A., & Couper, M. P. (2015). A meta-analysis of breakoff rates in mobile web surveys. In D. Toninelli, R. Pinter, & P. de Pedraza (Eds.), *Mobile research methods: Opportunities and challenges of mobile research methodologies* (pp. 81–98). London: Ubiquity Press. Available from <https://www.ubiquitypress.com/site/chapters/e/10.5334/bar.f/>

Week 6: Data quality of online panels

By the end of this unit, you will know...

- How to judge the quality of online panels samples
- Setting up an online panel study quality experiment
- Interpret online panel comparison studies experiment

Video lecture: available on Friday, 19 March 2021

Online meeting: Friday, 26 March 2021, 6:00 PM CET (1:00 PM EDT)

Assignment 6:

- Released: Friday, 19 March 2021
- Due: Monday, 29 March 2021, 11:30 PM CEST (6:30 PM EDT)

Required readings:

- Callegaro, M., Villar, A., Yeager, D. S., & Krosnick, J. A. (2014). A critical review of studies investigating the quality of data obtained with online panels. In M. Callegaro, R. P. Baker, J. Bethlehem, A. S. Göritz, J. A. Krosnick, & P. J. Lavrakas (Eds.), *Online panel research. A data quality perspective* (pp. 23–53). Chichester, UK: Wiley. Available from <https://static.googleusercontent.com/media/research.google.com/en//pubs/archive/42494.pdf>
- MacInnis, B., Krosnick, J. A., S. Ho, A., & Cho, M.-J. (2018). The accuracy of measurements with probability and nonprobability survey samples. Replication and extension. *Public Opinion Quarterly*, 82(4), 707-744.
- Kennedy, C., Mercer, A., Keeter, S., Hatley, N., McGeeney, K., & Gimenez, A. (2016, May 2). *Evaluating online nonprobability surveys. Vendor choice matters; widespread errors found for estimates based on blacks and Hispanics*. Available from <https://www.pewresearch.org/methods/2016/05/02/evaluating-online-nonprobability-surveys/>

Recommended readings (not mandatory):

- Blom, A. G., Bosnjak, M., Cornilleau, A., Cousteaux, A.-S., Das, M., Douhou, S., & Krieger, U. (2016). A Comparison of Four Probability-Based Online and Mixed-Mode Panels in Europe. *Social Science Computer Review*, 34(1), 8–25.

Week 7 & 8: Web survey programming exercise

No online meetings for unit 7 and 8.

By the end of these units, you will know...

- Understand the different component of a web survey software
- Program a medium to complex web survey
- Add paradata to the web survey script
- Launch the programmed survey to the students taking part of the class
- Learn how to look at survey quality reports from the tool used to program the survey

Video lecture: available on Friday, 26 March 2021

Subjects of the video lecture:

- Web survey software
- Key concepts on how to program a web survey

Required readings:

From Sage textbook:

- Chapter 5.3 Web survey software

From Wiley textbook:

- Chapter 9: Web questionnaires and implementation.
- Supplementary material of Chapter 9 on the student companion website: <http://bcs.wiley.com/he-bcs/Books?action=chapter&bcsId=9087&itemId=1118456149&chapterId=103123>

Recommended readings (not mandatory):

- Macer, T. (2014). Online panel software. In M. Callegaro, R. P. Baker, J. Bethlehem, A. S. Göritz, P. J. Lavrakas, & J. A. Krosnick (Eds.), *Online panel research. A data quality perspective* (pp. 413–440). Chichester: Wiley.
- Kaczmirek, L. (2017). Online survey software. In N. G. Fielding, R. M. Lee, & G. Blank (Eds.), *The SAGE handbook of online research methods* (2nd ed., pp. 203–219). London: Sage.
- Jabine, T. B. (1985). Flow charts: A tool for developing and understanding survey questionnaires. *Journal of Official Statistics*, 1(2), 189–207. Available from: <https://www.scb.se/contentassets/ca21efb41fee47d293bbee5bf7be7fb3/flow-charts-a-tool-for-developing-and-understanding-survey-questionnaires.pdf>

Online survey software help centers:

- Qualtrics: <https://www.qualtrics.com/support/survey-platform/getting-started/survey-platform-overview/>
- LimeSurvey: https://manual.limesurvey.org/LimeSurvey_Manual
- 1KA: <https://www.1ka.si/d/en/help>

Final exam

Web survey programming

Released: Friday, 26 March 2021

Due: Monday, 12 April 2021 11:30 PM CET (6:30 PM EST)