Colloquium: Survey Research Methodology
Course Syllabus

FS2021

Prof. Dr. Aya Kachi

Office: Home/WWW
E-Mail: aya.kachi@unibas.ch
Office hours: Tuesdays 15:00-16:00 (Zoom)

1 Course information

VV-Nr: 43494/50768

Term: FS 2021 (1.3.2021 - 31.5.2021)

Level/Type: Master's level, Seminar

Language of instruction: English

Location: Zoom. Zoom link on ADAM and on the course webpage.

Time: Monday 16:15 - 19:45

> 16:15-18:00 (105) colloquium
> 18:00-18:30 (30) break
> 18:30-19:45 (75) colloquium
> In some weeks, I will shorten the real-time lecture time by providing self-learning video clips.

2 Course objectives and motivation

The course is an applied methods colloquium taught at a master's degree level. The main goal is to prepare us for conducting simple research and writing a short version of an academic report using a survey or survey-experiment method. The course covers four major areas: (1) the nature of the survey response, including the typical psychology of attitude expressions, issues of question wording and context, and social desirability pressures; (2) general topics in quantitative research, including random and systematic measurement errors, and the logic of causal analysis; (3) implementing online surveys with convenience and population-based samples, and (4) analyzing and interpreting treatment effects (for survey experiments) and learn how/what to report.

In the latter half of the colloquium (for full-module students – see Section 4), we, the whole class collectively, draft a survey (or a survey experiment depending on the year's topic) and field it with an appropriate sample of respondents. The class survey project's topic will likely be within the realm of current energy-, environment-, sustainability-, or AI-related issues. (I will explain this in the first session.) After all, if we want to learn a method in the most practical way, which is to learn by doing, we need to agree on a single topic relevant to many of us. However, this should not prevent you from learning survey research methods even when your research interests lie outside of these topics. For instance, you might be interested in studying opinion or attitude formation in the context of marketing or international trade. I strongly encourage you to reflect on the methodology and the topics we cover in class with your favorite research

context. If you have questions and thoughts about survey issues in your research area, please do not hesitate to share or ask in- and outside the class. The chances are that some others in the class would also be interested in such issues.

Survey-based data collection enables various interesting empirical studies. For example, public opinion studies investigate simple but fundamental puzzles around us. *Why did (or did not) somebody vote/think/behave in a certain way? Why did this person choose a particular product among hundreds of options? Why do we hold different perceptions on the same topic/product/policy?* Another example of increasing salience is an empirical study that analyzes sources of varying perceptions by experts, e.g., politicians, interest groups, and industry actors. Here, the respondents would answer your questions not as individual voters but as actors with specific expert knowledge. Survey research turns all these casual but essential questions into more elegant and scientific statements that we can test empirically. It allows us to test these mechanisms behind opinion and attitude formation. As people's minds are complex, we have to be very careful in designing and wording surveys to ensure that what we ask is measuring what we intend to measure. We will learn "how to" by doing it. Welcome to this exciting field.

Next, I will mention some technical aspects. For learning about and conducting surveys and survey experiments, we will use Qualtrics as a survey software and R for computing simple statistics (e.g., for estimating experimental treatment effects). The course "Energy and Climate Policy–Citizens' Perspectives" (VV-Nr: 43030, offered in HS) is not a strict requirement but is highly recommended before taking this course. Basic knowledge of sampling, statistics, and regressions (e.g., OLS and logit) would be beneficial. If you have concerns about these prerequisites, do not hesitate to talk to me at the beginning of the semester.

Finally, I hope that you enjoy this creative process of survey research. The collective work in class naturally requires some coordination effort and hard work also outside of the course, but cooperation and sometimes compromises are also the very reality of our research life. They are all part of our learning in this colloquium.

3 Course material

All the related course material will be available on the course webpage.
Course webpage: https://www.ayakachi.org/survmeth2021 (to be published on March 3, 2021).
Password: Some contents are password-protected. You will find the password on ADAM.

3.1 Mandatory and recommended readings

- Learning in this colloquium is based mainly on course handouts, in-class discussions, and homework. Your attendance and active participation are fundamental.

- This course assumes that students are familiar with the reading materials from the course "Energy and Climate Policy–Citizens' Perspectives" (VV-Nr: 43030, offered in HS). For your convenience, these reading materials are available for download on the course webpage:
  https://www.ayakachi.org/survmeth2021.

- **Bain et al. (2021).** In particular, the article by Bain et al. (*Nature Climate Change*, 2012) will be repeatedly used in this class as an example. We will need this for our replication exercise as well. I expect all of you to familiarize yourself to the paper.

3.2 Potential resources for a survey method overview

As Handout 1 explains, in my view, there is no single textbook that helps us become great survey researchers. (If you think otherwise, I would appreciate your input and suggestions!) Therefore, I use my own handouts in this colloquium. However, I would also understand if you say that you feel more comfortable having a textbook next to you. Here are a few books I found partly useful. These are not required reading assignments for the course.

- Fowler Jr, Floyd J. *Survey research methods*. Sage publications, 2013.

- Groves, Robert M., et al. *Survey methodology.* Vol. 561. John Wiley & Sons, 2011.

4 Module classification

The main module of this colloquium is the so-called "full module" of 6CP. However, students from the MSD (Master's Program in Sustainable Development) can choose from two options regarding the module type. Note the following differences and carefully select your module.

	Non-MSD students	**MSD students**	
Course title	Colloquium: Survey Research Methodology	Colloquium: Methods in Economics: Survey Data Collection and Analytics	
Module type	Full version	Option 2: Full version	Option 1: Core version
Credit points	6KP	6KP	3KP
Meeting hours/week	4 hours	4 hours	4 hours (first half of the semester)
VV-Nr.	43494	43494	50768
Difference?	The course is originally designed for this "Full Version," the version that meets for 4 hours every week. Regardless of the module type, this course takes the form of learning-by-doing. The biggest advantage — supposedly the most challenging but most exciting part — of the full version is the collective survey project we work on as a whole class. This means, after agreeing on a collective topic, we will design research using a survey (experiment), draft a survey (experiment) together paying great attention to wording and respondents' psychology, and fielding the survey in cooperation with a survey firm, analysing the (real!) survey data.	You have seen the advantage of the extended version (on the left). However, I am also offering the "2-hour" version of the course as part of the extended version for MSD students. This version attempts to focus on the minimum core of the method without losing the feel of hands-on learning. This version still involves a fair amount of software learning such as designing surveys with Qualtrics and programming data analyses with R. However, one would miss the opportunity to experience drafting a good survey by conducting one.	
Final grade	**Minimum requirement for a pass:** 70% attendance of the total air time **Grading scheme:** If the above requirement is met, Homework assignments (30%) Active participation, incl. project (40%) Final project report (30%) **Final grade:** Pass or Fail	**Minimum requirement for a pass:** 70% attendance of the total air time **Grading scheme:** If the above requirement is met, Homework assignments (20%) Active participation (20%) Final exam (60%) **Final grade:** Mark on the 1.0-6.0 scale	

5 Final grade

See the above table for relevant information about each module. The final grade will not be curved, meaning that if all of you perform excellently throughout the course, then all of you could receive 100% of the possible points. In other words, there are no targeted mean point and standard deviation for the overall grade distribution for the course.

The main theme of this colloquium is to learn survey and survey experiment methods by doing it. Therefore, your active participation in class is a critical component of successful completion. This includes in-class discussion on specific topics and readings as well as the design and drafting of our collective survey. This colloquium is really about doing research together.

There are small homework assignments along the way.

The final project report will be based on the collective survey project that the whole class will design and field. For the exceptional 3KP track, the final exam will replace the final project and project report. Again, the full track (6KP) with the original survey study is a highly recommended format if you really want to master a complete research flow that involves any survey studies.

6 Academic integrity

It is your responsibility to familiarize yourself with the university's protocol regarding academic integrity. I will refer instances of academic dishonesty to the Dean of Studies office (Studiendekanat) for adjudication.

7 Office hours (FS 2021)

Tuesdays from 15:00-16:00 on Zoom.

You are more than welcome to come to me and ask questions about the lecture, course material, and related issues in person. This semester, I am holding my office hours on Tuesdays from 15:00-16:00 on Zoom. During this time slot, you can visit the Zoom "office" without an appointment. However, it would be, of course, more helpful and make our meetings more efficient if you could briefly tell me what you want to discuss in an email beforehand.

Zoom link for office hours: See ADAM or the course webpage.

8 Topics covered

* I reserve the right to make changes in the syllabus as necessary.

Last updated: Feb 2021

	Date	Lecture topics	Tutorial & In-class activities	Homework assignments
1	1.3.2021	(1) Introduction and discussions on how we should proceed for the rest of the semester. (2) What is a survey? (3) How does a research project involving surveys look?	Participate: HW 0: A short survey (10 minutes, Anonymous). Observe: (1) What survey was created last year? Discussion 1: (2) What do you think the researchers wanted to study based on this survey?	After the March 1 session, (1) Read Bain et al. (2012). (2) Create your Qualtrics account. (See Email.) (3) Check our Qualtrics accounts by looking at the shared HW0 survey project. (You do not need to know waht Qualtrics yet!)
2	8.3.2021	(1) Summary of the survey (HW 0). (2) What is a survey experiment? (3) Survey draft and codebook. (4) Survey infrastructure. (Software/Qualtrics, firm, sampling.)		(1) Read Biermann, Kanie, et al. (2017) If you have not finished, (2) Create your Qualtrics account. (3) Check our Qualtrics accounts by looking at the shared HW0 survey project.
3	15.3.2021	(1) Mechanisms of attitude formation. Frames / Cues / Cognitive biases. (2) Role of subjective & objective knowledge.	Guest lecture & discussion: (1) by Dr. Basil Bornemann & Dr. Marius Christen (Uni Basel) - Class project, Agenda 2030, SDGs. Discussion : (2) Expert survey vs. public opinion survey? Exercise: (3) Qualtrics functions.	(1) Skim through the "Methodology" section of Duygan, Kachi, et al. (2021), working paper. (Expert survey.) (2) Skim through https://www.eda.admin.ch/dam/agenda2030/en/documents/laenderbericht-der-schweiz-2018_EN.pdf (3) Skim through https://www.gold.uclg.org/report/localizing-sdgs-boost-monitoring-reporting
4	22.3.2021	(1) Review of Bain (2012). (2) ATE estimation: Concept. (3) Validity and reliability of measures. (4) Aggregation of multiple survey items.	(1) Guest lecture (2) by Dr. Bornemann & Dr. Christen (Uni Basel) - On expert surveys related to Agenda 2030, SDGs, etc.	

			(2) R for first-timers. (Optional attendance.)	
5	29.3.2021		(1) Estimating ATE with R.	HW2: Factor analysis with R by replicating an existing survey study. (Group work; Individual submission.)
			(2) Start discussing class project topics. What about data science job perceptions?	
	5.4.2021	No class: Easter Break		
6	12.4.2021	(1) HW2: Review. (2) Review of the survey draft concept.		
			(1) Start designing our survey (experiment). (Group work) (2) Decide on treatments. (3) Decide on outcomes	
		End of the 3KP module		
7	19.4.2021		(1) Continue: Design our survey (experiment). (Group work.) (2) Decide on controls / general attitudes.	
8	25.4.2021		(1) Continue: Design our survey (experiment). (Group work.) (2) "Finalize" survey draft. (3) Ideas for the raffle?	(1) A few brave volunteers will input the finalized survey into Qualtrics. (2) The rest of us (on Qualtrics) checks the survey flow and survey wording.
9	3.5.2021		Discussions on revision of the survey.	(1) Time for expert reviews. (2) Multi-language translations if necessary.
		Ideally around here or the week after, we will field the survey!!		
10	10.5.2021	(1) How do we distribute an online survey? (2) Strategizing the analysis of the survey data. (3) Instruction for the final research note. (4) Data cleaning.		
11	17.5.2021	Final research note consultation	Final examination for the 3KP option	

	24.5.2021	No class: Pfingstmontag		
12	31.5.2021	Final research note consultation. / Buffer time.		
	June 2021	Submit research report (6KP		