

University of Lucerne
Digital Skills Workshop
Fall 2023

SYLLABUS

Experimental (Survey) Methods in Social Sciences

Class meetings: Friday 09:00 - 17:00 (November 10 & 24); Saturday 09:00 - 17:00 (November 11 & 25)

Format: In person, room TBD

Instructor: Emma Hoes (hoes@ipz.uzh.ch)

1. COURSE DESCRIPTION

In today's rapidly evolving landscape, understanding the effects of various phenomena, such as social media use, has become increasingly important. However, with social media platforms reducing access to their data, researchers are faced with new challenges. To overcome these obstacles, survey experiments have emerged as a vital methodological tool in the social sciences. These experiments provide clear causal inference while capitalizing on the flexible survey context for behavioral research, making them applicable across a wide range of fields.

This course offers a comprehensive exploration of survey experiments, emphasizing their significance and practical application in understanding social science theories. Through the analysis of published examples of experimental research, participants will gain insights into the diverse ways in which survey experiments can be utilized. The course aims to equip students with the necessary skills to effectively design and implement survey experiments, while addressing key challenges related to sampling techniques, survey modes, ethical considerations, effect heterogeneity, and more.

By the end of the course, students will have a solid grasp of the value of survey experiments in establishing causal relationships, as well as the ability to design both simple and complex experiments. Moreover, they will develop the capacity to critically evaluate experimental research and apply these methodologies to their own research endeavors. Notably, the course highlights the growing importance of survey experiments using mock social media platforms in shedding light on the effects of social media use and other pertinent topics, given the limitations on accessing data directly from social media platforms. The course will also focus on one or two substantive topics more in-depth when discussing experimental designs and

their findings. These substantive topics will be determined based on students’ interests tapped before the start of the course.

If you are interested in gaining a deeper understanding of the power and versatility of survey experiments, enabling you to contribute meaningfully to the ever-expanding field of social science research, then this is the right course for you. Interested students are not required to have any prior knowledge and/or skills, although some basic statistical background and broad familiarity with any social sciences is recommended as the course will focus more on the design than analyses part of survey experiments, and will rely on social science phenomena to do so.

2. LEARNING OUTCOMES

By the end of this workshop, you should be able to...

1. Explain how to design experiments that speak to relevant research questions and theories
 - a. *Optional (dependent on student interest): Grasp the extent to which mock social media platforms are useful to understand the consequences and dynamics of social media use*
2. Evaluate the uses and limitations of several common survey experimental paradigms
3. Identify practical issues that arise in the implementation of experiments and evaluate how to anticipate and respond to them
4. Evaluate the strengths, weaknesses, and ethics of experiments as a research design and evaluation method.
5. Understand the differences between and applicability of survey experiments, natural experiments and field experiments
6. Develop a pre-analysis plan

3. PRELIMINARY PROGRAM

<p>Day 1 (Friday (10/11)- 09:00 - 17:00)</p> <p><i>Survey Experiments in Context, Examples and Paradigms</i></p>	<ol style="list-style-type: none"> 1. Introduction and Course Overview 2. History of the Survey Experiment 3. Potential Outcomes Framework of Causality 4. Translating Theories into Experiments 5. Paradigms (Question Wording, Vignettes, Sensitive items, etc.)
<p>Day 2 (Saturday (11/11))</p>	<ol style="list-style-type: none"> 1. External Validity

<p>09:00 - 17:00)</p> <p>Practical Issues</p>	<p>a. <i>Mock Social Media Platforms</i></p> <ol style="list-style-type: none"> 2. The SUTO Framework (Setting. Units. Treatments. Outcome) 3. Lingering issues (Attention, Satisficing, Self-Selection, Ethics, PAPs) 4. Handling of “Broken Experiments” 5. PAP preparation
<p>Day 3 (Friday (24/11) 09:00 - 17:00)</p> <p><i>Beyond Surveys: Natural and Field Experiments</i></p> <p><i>Hands-on Practice Session</i></p>	<ol style="list-style-type: none"> 1. Natural and Field Experiments 2. Experiments: <i>substantive topic(s) based on student interests</i> 3. Students further develop experimental design individually or in pairs 4. Group discussions on experimental Design 5. Presentation Preparation
<p>Day 4 (Saturday (25/11) 09:00 - 17:00)</p> <p><i>Presentations, Conclusions, Next Steps, & End of Course Drinks</i></p>	<ol style="list-style-type: none"> 1. Presentations 2. Summary and Conclusion: The Future of Survey Experiments

4. ASSESSMENT

Students are required to study all assigned readings for Day 1 and Day 2. Note that these readings need to be done before the start of each session. Day 3 and Day 4 will entail less readings and focus on practical exercises and discussion. The number of readings for Day 1 and Day 2 are therefore quite substantial.

Students are to prepare a Pre-Analysis-Plan (PAP) (written assignment to be worked on during class on Day 2, and handed in the week before Day 3) and verbally present their corresponding experimental design in class during Day 4. The written and verbal assignments will be graded with pass/fail. Precise instructions will follow.

Deadline PAP: November 19th, 5pm.

5. REQUIRED READINGS

Additional/alternative readings will be assigned based on students' substantive interests (e.g., findings of experimental research in substantive domains such as campaign messages, media influence, education, judgement and decision-making, etc.). These readings will then be discussed during Day 3.

READINGS DAY 1.

Holland, P. W. 1986. "Statistics and Causal Inference." *Journal of the American Statistical Association* 81: 945-960.

Druckman, J. N., Green, D. P., Kuklinski, J. H., and Lupia, A. 2006. "The Growth and Development of Experimental Research in Political Science." *American Political Science Review* 100: 627-635.

Kuklinski, J. H. and Hurley, N. L. 1994. "On Hearing and Interpreting Political Messages: A Cautionary Tale of Citizen Cue-Taking" *The Journal of Politics* 56: 729-751.

Schuldt, J. P., Konrath, S. H., and Schwarz, N. 2011. "'Global Warming' or 'Climate Change'?": Whether the Planet is Warming Depends on Question Wording." *Public Opinion Quarterly* 75: 115-124.

Banerjee, A., Green, D. P., McManus, J., and Pande, R. (2014). "Are poor voters indifferent to whether elected leaders are criminal or corrupt? A vignette experiment in rural India." *Political Communication* 31(3): 391-407.

Glynn, A. N. 2013. "What Can We Learn with Statistical Truth Serum?: Design and Analysis of the List Experiment." *Public Opinion Quarterly* 77: 159-172.

Albertson, B. L. and Lawrence, A. 2009. "After the Credits Roll: The Long-Term Effects of Educational Television on Public Knowledge and Attitudes." *American Politics Research* 37: 275-300.

Hainmueller, J., and Hopkins, D. J. (2015). The hidden American immigration consensus: A conjoint analysis of attitudes toward immigrants. *American Journal of Political Science*, 59(3): 529-548.

READINGS DAY 2.

Gaines, B. J., Kuklinski, J. H., and Quirk, P. J. 2007. "The Logic of the Survey Experiment Reexamined." *Political Analysis* 15: 1-20.

Clifford, S. and Jerit, J. 2015. "Do Attempts to Improve Respondent Attention Increase Social Desirability Bias?" *Public Opinion Quarterly* 79: 790-802.

Miratrix, L.W., Sekhon, J.S., Theodoridis, A.G., and Campus, L.F. 2018. "Worth Weighting? How to Think About and Use Weights in Survey Experiments." *Political Analysis*: in press.

Bolsen, T. 2013. "A Light Bulb Goes On: Norms, Rhetoric, and Actions for the Public Good." *Political Behavior* 35: 1-20.

Hainmueller, J., Hangartner, D., and Yamamoto, T. 2015. "Validating Vignette and Conjoint Survey Experiments Against Real-World Behavior." *Proceedings of the National Academy of Sciences*: In press.

Druckman, J. N. and Leeper, T. J. 2012. "Learning More from Political Communication Experiments: Pretreatment and Its Effects." *American Journal of Political Science* 56: 875-896.

Hertwig, R. and Ortmann, A. 2008. "Deception in Experiments: Revisiting the Arguments in Its Defense." *Ethics & Behavior* 18: 59-92.

Mullinix, K. J., Leeper, T. J., Druckman, J. N., and Freese, J. 2015. "The Generalizability of Survey Experiments." *Journal of Experimental Political Science*.

FURTHER READING

Though not assigned for the course, the following texts may serve as useful background reading or places for further inspiration in the design and analysis of survey experiments.

Books

Gerber, A.S. and Green, D.P. 2012. *Field Experiments: Design, Analysis, and Interpretation*. New York: W.W. Norton.

Groves, R.M., et al. 2009. *Survey Methodology*. Wiley-Interscience.

Morgan, S.L. and Winship, C. 2015. *Counterfactuals and Causal Inference*. 2nd Edition. New York: Cambridge.

Mutz, D.C. 2011. *Population-Based Survey Experiments*. Princeton, NJ: Princeton University Press.

Schuman, H. and Presser, S. 1981. *Questions and Answers in Attitude Surveys: Experiments on Question Form, Wording, and Context*. SAGE Publications.

Glennerster R. and Takavarasha, K. 2013. *Running Randomized Evaluations: A Practical Guide*. Princeton, NJ: Princeton.

Auspurg, K. and Hinz, T. 2015. *Factorial Survey Experiments*. SAGE Publications.

Survey, Experimental, and Survey-Experimental Methodology

Sensitive Items

Tourangeau, R. and Smith, T. W. 1996. "Asking Sensitive Questions: The Impact of Data Collection Mode, Question Format, and Question Context." *Public Opinion Quarterly* 60: 275-304.

Blair, G. and Imai, K. 2012. "Statistical Analysis of List Experiments." *Political Analysis* 20: 47-77.

Kreuter, F., Presser, S., and Tourangeau, R. 2009. "Social Desirability Bias in CATI, IVR, and Web Surveys: The Effects of Mode and Question Sensitivity." *Public Opinion Quarterly* 72: 847-865.

Mediation

Jamieson, J. P. and Harkins, S. G. 2011. "The Intervening Task Method: Implications for Measuring Mediation." *Personality & Social Psychology Bulletin* 37: 652-661.

Green, D. P., Ha, S. E., and Bullock, J. G. 2009. "Enough Already about 'Black Box' Experiments: Studying Mediation is More Difficult than Most Scholars Suppose." *The ANNALS of the American Academy of Political and Social Science* 628: 200-208.

Imai, K., Keele, L. Tingley, D., and Yamamoto, T. 2011. "Unpacking the Black Box: Learning about Causal Mechanisms from Experimental and Observational Studies." *American Political Science Review* 105(4): 765-789.

Sampling and Representativeness

Wang, W., Rothschild, D., Goel, S., and Gelman, A. 2015. "Forecasting Elections with Non-representative Polls." *International Journal of Forecasting*: In press.

Chandler, J., Paolacci, G., Peer, E., Mueller, P., and Ratliff, K. A. 2015. "Using Nonnaive Participants Can Reduce Effect Sizes." *Psychological Science*: In press.

Banducci, S. and Stevens, D. 2015. "Surveys in Context: How Timing in the Electoral Cycle Influences Response Propensity and Satisficing." *Public Opinion Quarterly* 79: 214-243.

Factorial Experiments

Hainmueller, J., Hopkins, D. J., and Yamamoto, T. 2014. "Causal Inference in Conjoint Analysis: Understanding Multi-Dimensional Choices via Stated Preference Experiments." *Political Analysis* 22: 1-30.

Treatment Preferences

Hovland, C. I. 1959. "Reconciling Conflicting Results Derived from Experimental and Survey Studies of Attitude Change." *American Psychologist* 14: 8-17.

Leeper, T. J. 2017. ““How Does Treatment Self-Selection Affect Inferences About Political Communication?” *Journal of Experimental Political Science* 4(1): 21–33.

Ethics

Sterling, T. D., Rosenbaum, W. L., and Weinkam, J. 1995. “Publication Decisions Revisited: The Effect of the Outcome of Statistical Tests on the Decision to Publish and Vice Versa.” *The American Statistician* 49: 108-112.

Franco, A., Malhotra, N., and Simonovits, G. 2015. “Underreporting in Political Science Survey Experiments: Comparing Questionnaires to Published Results.” *Political Analysis* 23: 306-312.

General Statistics

Gelman, A., and Stern, H. 2006. “The Difference Between ‘Significant’ and ‘Not Significant’ is Not Itself Statistically Significant.” *The American Statistician* 60(4): 328-331.

INSTRUCTOR BIO

Emma Hoes is a Postdoctoral Research Fellow at the Department of Political Science at the University of Zurich (UZH). Previously, she obtained her PhD at the Department of Political and Social Sciences at the European University Institute in Florence, Italy. At the UZH, Emma is involved in the ERC-funded project *PRODIGI* as well as the *Digital Democracy Lab*.

Her research focuses on several challenges that came about with the advancement of digital technologies, such as misinformation, micro-targeting, online content moderation, and - more broadly speaking - the role of social media in our daily media-diet. Emma is particularly interested in the extent to which the numerous interventions against these potentially harmful phenomena are effective, but especially to what extent such interventions may cause unintended spill-over effects. Method-wise, she enjoys designing survey- and field-experiments, as well as using computational social science approaches and digital trace-data.