

**Workshop**  
**Factorial Survey Design**  
**With a particular focus on employer-based surveys**

October, 6 and 7 2022

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Short introduction

Factorial surveys combine advantages of conventional surveys and experiments. Each respondent evaluates several short hypothetical descriptions of situations (vignettes) whose attributes (dimensions) vary experimentally on a defined number of levels. The experimental design of the factorial survey creates the opportunity to employ random variation of the parameters of the particular situation. The randomization allows one to estimate the causal effects of the varying stimuli in the vignette based on the evaluation of the respondents. A substantial advantage of the factorial design is that one can implement the experimental logic in a classical survey.

In this workshop, we provide a theoretical and practical overview of factorial survey design. Building on best practice examples, we show different fields of application. One major field of application are employer-based surveys that have been widely used to study recruiters' hiring intentions. To study recruiters' hiring intentions, respondents with responsibility for personnel are presented with vignettes describing fictive candidates and asked to rate the probability that they would invite these candidates to a job interview.

Participants will get an overview of factorial survey designs with a particular focus on employer-based surveys. Moreover, participants will gain practical insights into creating factorial survey designs, implementing factorial survey designs in online surveys, data management and data analysis.

For the practical exercises, participants should have basic knowledge of the statistical software package Stata. Furthermore, participants will learn how to use the software package Unipark to implement factorial survey designs in online surveys (no prior knowledge required).

## Course instructor

PD Dr. Andreas Damelang and Jan Gniza, M.Sc.

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## Program

Thursday, 6<sup>th</sup>

09:00-10:30; coffee break 11:00-12:30; lunch break; 14:00 to 15:30; coffee break 16:00-17:30

- Introduction to factorial survey designs (vignettes)
  - Short introduction to experiments and causality
  - What are vignettes
  - What can we do with vignettes
  - Criteria of good vignettes
  - Sampling
  - *Lecture*
- Drafting first vignettes based on participants' research / PhD project
  - The participants should consider how to use a vignette based on their research projects and should try to create a small vignette
  - Discussion and conclusion
  - *Individual learning and support by us*

Friday, 7<sup>th</sup>

09:00-10:30; coffee break 11:00-12:30; lunch break; 14:00 to 15:30; coffee break 16:00-17:30

- Implementing and programming vignettes in an online questionnaire
  - How to program an online questionnaires and how to implement vignettes
  - *Stata, creating an excel sheet with all vignettes*
  - *Unipark, Practical exercise*
- Analyzing vignettes
  - How to prepare the data (wide to long format)
  - How to analyze and interpret the results
  - *Stata, practical exercise*

## Literature

### *Essential reading*

Auspurg, K. and Hinz, T. (2015). Factorial survey experiments (Vol. 175). Los Angeles: Sage Publications.

### *General reading*

Auspurg, K., Hinz, T., Liebig, S. and Sauer, C. (2015). The Factorial Survey as a Method for Measuring Sensitive Issues. In U. Engel, B. Jann, P. Lynn, A. Scherpenzeel, & P. Sturgis (Eds.), *Improving Survey Methods. Lessons from recent Research* (pp. 137-149). New York: Routledge.

Jasso, G. (2019). Factorial Survey. In P. Atkinson, S. Delamont, A. Cernat, J.W. Sakshaug and R.A. Williams (Eds.), *SAGE Research Methods Foundations*. doi: 10.4135/9781526421036888176

Treischl, E. and Wolbring, T. (2021). The Past, Present and Future of Factorial Survey Experiments: A Review for the Social Sciences. *methods, data, analyses*, 1-30.

### *Examples of employer-based surveys*

Damelang, A., Ebersperger, S. and Stumpf, F. (2020): Foreign credential recognition and immigrants' chances of being hired for skilled jobs – Evidence from a survey experiment among employers. *Social Forces*, 99, 648-671.

Di Stasio, V. and van de Werfhorst, H.G. (2016). Why Does Education Matter to Employers in Different Institutional Contexts? A Vignette Study in England and the Netherlands. *Social Forces*, 95, 77–106.

Fossati, F., Wilson, A., and Bonoli, G. (2020). What Signals Do Employers Use When Hiring? Evidence from a Survey Experiment in the Apprenticeship Market, *European Sociological Review*, 36, 760–779.

McDonald, P. (2019): How Factorial Survey Analysis Improves Our Understanding of Employer Preferences. *Swiss Journal of Sociology*, 45, 237–260.

Van Belle, E., Di Stasio, V., Caers, R., De Couck, M. and Baert, S. (2018). Why Are Employers Put Off by Long Spells of Unemployment?. *European Sociological Review*, 34, 694–710.