

Workshop 4. An introduction to causal inference in research on personality

Speakers:

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Objectives:

Causal inference is a central goal of science. However, knowledge about causal effects and mechanisms tends to grow at a very slow pace, if at all, in research on personality (e.g., Asendorpf et al., 2016; Grosz et al., 2020; Möttus & Kandler, 2018). In this workshop, I will give an introduction to causal inference in the context of personality research. I will address the following questions: What is causal inference and why should we care? What are some of the biggest threats to causal inference in personality psychology? What are tools and methods that might help deal with these threats? First, I will give a brief introduction to causal inference and directed acyclic graphs (DAGs). DAGs provide visual representations of causal effects and assumptions. Afterwards, I will talk about research investigating causal effects on personality traits (e.g., effect of studying at a university on conscientiousness). I will provide examples for this kind of research, talk about the challenges of this research and methods that might help to overcome these challenges. Then, I will talk about research investigating the causal effects of personality traits (e.g. effect of conscientiousness on health and longevity). I will again provide examples, talk about its challenges and methods that might help to overcome these challenges. Finally, there will be a hands on exercise. In this exercise, the attendees will draw DAGs and search for identification strategies for their own research questions.

Disclaimer: It is very challenging to establish causal effects in research on personality. For some research questions, establishing causal effects might not be possible at all at the moment. In the workshop, I will make attendees aware of common challenges to causal inference. Furthermore, I will inform about tools and methods that can help to overcome some of these challenges under some circumstances.

Requirements:

Workshop attendees should be familiar with data analysis, basic statistics, and multiple regression. A laptop might help to draw a DAG in the exercise, but it is not a necessary precondition to bring a laptop.

Short Workshop Program:

1. Brief introduction to causal inference and directed acyclic graphs (DAGs)
2. Common threats to causal inference when estimating effects on personality (personality as outcome variable) + Ways to (not) deal with these threats
3. Common threats to causal inference when estimating effects of personality (personality as the treatment variable) + Ways to (not) deal with these threats
4. Hands on exercises: drawing a causal graph, finding an identification strategy for a causal effect, and discussing the graph and strategy in plenum.