Department of Biostatistics and Medical Informatics Seminar

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Professor
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Friday, September 18, 2020
12:00-1:00 pm

Join Zoom Meeting
https://uwmadison.zoom.us/j/99187168121
Meeting ID: 991 8716 8121

Mediation Analysis with Unobserved Mediator-Outcome Confounding

Abstract: Causal mediation analysis aims to decompose total causal effects into direct and indirect causal effects. But whereas randomization of an exposure identifies the total causal effect, it does not identify direct or indirect effects in the presence of unobserved mediator-outcome confounding. We propose a new method for the identification of direct and indirect effects in the presence of unobserved mediator-outcome confounding in linear models. Our basic approach rests on a fixed-effects-like parallel trend assumption. We present identification results with and without this parallel trend assumption, a new sensitivity analysis, and a new evaluation design to calibrate our approach with real data. This is joint work with Yongnam Kim.

Biography: Felix Elwert (Ph.D., Harvard 2007) is Romnes Professor of Sociology and Professor (affiliated) of Biostatistics and Medical Informatics. He works on problems in applied causal inference and quasi-experimental designs.

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