

How Closely Can Propensity Analysis Mimic Experiments?

Professor Philip Dawid

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Institute of Criminology Public Seminar Series

Thursday 14th March 2013, 5.30pm (Date changed from that previously advertised)

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Seminar Room B3, Institute of Criminology,
Sidgwick Avenue, Cambridge, CB3 9DA

A drinks reception in the basement foyer will follow this seminar for attendees

Randomized experiments are the gold standard for estimating causal effects of treatments, but are very often infeasible. We are then reduced to using observational data - but this is rife with the potential to mislead.

Some strategies for mitigating this problem include adjustment for predictive covariates, matching, and propensity analysis, introduced by Donald Rubin and Paul Rosenbaum in 1983. In this seminar I will give an account of the main ideas of propensity analysis, discuss its pros and cons, and consider some examples of its use in criminological research.

Philip Dawid is Professor of Statistics in the Cambridge University Department of Pure Mathematics and Mathematical Statistics, and Director of the Cambridge Statistics Initiative. He has been awarded the Royal Statistical Society's Guy Medal in Silver for his wideranging research, which includes a long-standing interest in the interpretation of evidence and, especially, causal reasoning. His recently edited volumes include "Simplicity, Complexity and Modelling", "Evidence, Inference and Enquiry", and "Causality: Statistical Perspectives and Applications", as well as the forthcoming book of the Darwin College Lecture Series on "Beauty".