Camilo A. Cárdenas-Hurtado

| CONTACT INFORMATION | Room: COL.8.05
Department of Statistics
London School of Economics | https://ccardehu.github.io/
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RESEARCH INTERESTS — Statistical and machine learning with latent variable models, Psychometrics, Causal Inference, Categorical data analysis, Survey sampling and design of experiments, Applications in educational testing, psychology, political science, economics.

ACADEMIC APPOINTMENTS

London School of Economics and Political Science (LSE), London, UK.

LSE Fellow — 2023/09 -

EDUCATION

London School of Economics and Political Science (LSE), London, UK.

PhD, STATISTICS (Social Statistics)

- Thesis: *Generalised Latent Variable Models for Location, Scale, and Shape Parameters* (Supervisors: Prof. Irini Moustaki and Dr. Yunxiao Chen)

Universidad Nacional de Colombia (UNAL), Bogotá D.C., Colombia.

MSc, STATISTICS

Graduate Diploma (Specialization), STATISTICS

BA, ECONOMICS

PREPRINTS AND WORK IN PROGRESS

A Generalized Additive Partial-Mastery Cognitive Diagnostic Model, with Y. Chen, I. Moustaki. *Under review*. (arXiv preprint: Link, R package: gapmCDM)

L_1 Rotation for Exploratory Generalized Bi-factor Analysis, with T.G Vasiljev, Y. Chen, and I. Moustaki (*In preparation*, R package: bifacL1rot)

Assessing DIF on Asymmetric Item Response Theory Models with Bounded Continuous Responses, with D. Molenaar (*In preparation*)

Ordering consistency: Generating indexes using ordinal data for regression analysis, with C. F. Balcázar (*In preparation*)

PEER-REVIEWED PUBLICATIONS

Cárdenas-Hurtado, C.A., Moustaki, I., Chen, Y., Marra, G. (2025) Generalized Latent Variable Models for Location, Shape, and Scale parameters. *Psychometrika*, 90(3):932-956 (Link, R package: glvmlss).

Cárdenas-Hurtado, C.A., Hernández, M.A., Torres, J.E. (2015), A Statistical Analysis of Heterogeneity on Labour Markets and Unemployment Rates in Colombia. *Revista Desarrollo y Sociedad*, 75(1):153-196, (Link)

POLICY PAPERS **Cárdenas-Hurtado, C.A.**, Hernández, M.A. (2019), Understanding the Consumer Confidence Index in Colombia: A structural FAVAR analysis. *Policy paper series - Borradores de Economía*, No. 1063. (Link)

Cárdenas-Hurtado, C.A., Garavito-Acosta, A., Toro-Córdoba, J. (2018), Asymmetric Effects of Terms of Trade Shocks on Tradable and Non-tradable Investment Rates: The Colombian Case. *Policy paper series - Borradores de Economía*, No. 1043. (Link)

Velasco, A.M., **Cárdenas-Hurtado, C.A.** (2015), A Macro CGE Model for the Colombian Economy. *Policy paper series - Borradores de Economía*, No. 863. (Link)

ACADEMIC TALKS

2025: Frontier Research in Educational Measurement (FREMO25, contributed, Oslo, NO); 15th Scientific Meeting of the Classification and Data Analysis Group (CLADAG25, invited speaker, Naples, IT).

2024: Brown-bag Statistics Seminar (online invited talk, Pennsylvania State University); International Meeting of the Psychometric Society (IMPS24, contributed, Prague, CZ).

2023: Social Statistics Seminar (LSE); Modern Modeling Methods (M3, contributed, CT, US); International Meeting of the Psychometric Society (IMPS23, contributed, MD, US).

2022: International Meeting of the Psychometric Society (IMPS22, contributed; travel award, Bologna, IT).

2021: Royal Statistical Society International Conference (RSS21, invited symposium, Manchester, UK).

TEACHING EXPERIENCE

London School of Economics and Political Science (LSE)

- DEPARTMENT OF STATISTICS
  ST102: Elementary Statistical Theory
  ST201: Statistical Models and Data Analysis
  ST205: Sample Surveys and Design of Experiments
  ST211: Applied Regression
  ST309: Elementary Data Analytics (Lecturer)
  ST312: Applied Statistics Project
  ST405/MY455: Multivariate Methods
  ST416: Multilevel Modelling

SCHOLARSHIPS & AWARDS

Class Teacher Award (LSE): 2022, 2024, 2025.

Psychometric Society Travel Award (Best student paper): 2022.

MPhil/PhD scholarship (LSE): 2019-2023.

ACADEMIC SERVICE

London School of Economics and Political Science (LSE)

- Academic Mentor, PhD representative, member of the Equity, Diversity and Inclusion Committee (EDI) and Departmental Teaching Committee (DTC), Mentor for MSc students.

Psychometric Society

- Member of the Diversity, Equity and Inclusion (DEI) Committee (2025-2028).

Editorial work

- Reviewer for: British Journal of Mathematical and Statistical Psychology (x1), Journal of Multivariate Analysis (x1), Psychological Methods (x1).

PROFESSIONAL EXPERIENCE
Banco de la República (Central Bank of Colombia), Bogotá, Colombia.
Macroeconomic Programming and Inflation Department.

Specialist Economist	2015/03 - 2019/07
Economist	2011/08 - 2015/02

SKILLS
Languages: Spanish (native), English (fluent), French (basic)

Programming: Proficient in: R, C++ (Rcpp), Python, Stata, MATLAB
Working Knowledge: Julia, GAMS

REFERENCES
Professor Irini Moustaki   e-mail: i.moustaki@lse.ac.uk
Department of Statistics
London School of Economics and Political Science

Dr. Yunxiao Chen   e-mail: y.chen186@lse.ac.uk
Department of Statistics
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Professor Jouni Kuha   e-mail: j.kuha@lse.ac.uk
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