

Francisco Cardozo

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Education

Education

2020-present:

PhD Student program in Prevention Science and Community Health. Department of Public Health Science, Miller School of Medicine, University of Miami.

Advisor: Eric C. Brown.

2018:

MSc Psychology. Universidad de los Andes. Bogotá, Colombia.

Thesis: Exploring Close and Extended Social Circles: How Different Types of Social Networks Influence Alcohol Use Among Students in Five Bogota Schools.

Advisor: Andres Molano.

2013:

BS Psychology. Universidad Nacional. Bogotá, Colombia

Thesis: Risk factors associated to experimental and heavy use of drugs in a sample of secondary school students.

Advisor: Augusto Pérez-Gómez.

Trainings

2023-09 Package Development in R Masterclass – Posit Conference. Chicago.

2023-09 Advanced *Tidymodels* for Machine Learning – Posit Conference. Chicago.

2023-09 Advanced Data Analytics Certificate – Google-Coursera.

2023-08 Version Control – Meta-Coursera.

2023-07 Instructor Software|Data|Library Carpentry – The Carpentries.

2023-05 Meta-Analysis Methods for Prevention Scientists. Tools for Understanding and Investigating Variation in Prevention Intervention Effects – Society for Prevention Research pre-conference workshop.

2023-04 Teaching Academy Certificate – University of Miami.

2023-03 Missing Data Using R – Statistical Horizons.

2022-07 Research Design for Causal Inference – University of Chicago.

2022-06 Introduction to Time-Varying Mediation Analysis with Application to Prevention Research – Society for Prevention Research pre-conference workshop.

Teaching

Teaching Assistantships

2023 June	R Medicine 101: Introduction to Clinical Data Analysis with R. R-consortium.
2023 Summer	BST 692: Data Science and Machine Learning for Health Research. Department of Public Health Sciences, University of Miami.
2023 Spring	BST 623: Software Tools for Manuscript Development and Reproducible Research. Department of Public Health Sciences, University of Miami.
2022	EPH 752: Advanced Research Methods. Department of Public Health Sciences, University of Miami.

Spring

- 2022 BST 692: Data Science and Machine Learning for Health Research.
Summer Department of Public Health Sciences, University of Miami.
- 2021 BST 623: Software Tools for Manuscript Development and Reproducible
Fall Research. Department of Public Health Sciences, University of Miami
- 2021 EPH 652: Research Methods. Department of Public Health Sciences,
Spring University of Miami.
- 2016 - EDUC 4026: Advanced Research Methods. Department of Education,
2018 Universidad de Los Andes. Colombia.

Guest Lecturer

- 2023 CBPC 1069 Education in Colombia: What is prevention science University of Los
Andes. Colombia.
- 2023 CBPC 1066 Social Policy Experiments: Causal Inference in Public Health
University of Los Andes. Colombia.
- 2023 CISO 4604 Project Evaluation: Guest lecture in Causal Inference University of
Los Andes. Colombia. Colombia.
- 2019 EDUC 4026 Advanced Quantitative Methods: Guest lecture in Moderation in
Regression University of Los Andes. Colombia.
- 2017 EPH 752 Advanced Research Methods: Guest lecture in Social Network Analysis.
University of Miami. USA.
- 2015 EPH 752 Advanced Research Methods: Guest lecture in Confirmatory Factor
Analysis. University of Miami. USA.

Class content development

- 2024 EPH 752 Advanced Research Methods: Software Integration for Data Analysis. University
of Miami. USA.
- 2022 EPH 752 Advanced Research Methods: Software Integration for Data Analysis. University
of Miami. USA.
- 2022 EPH 752 Advanced Research Methods: Dyadic Data Analysis. University of Miami. USA.
- 2022 EPH 752 Advanced Research Methods: Monte Carlo Simulation to Estimate Power.
University of Miami. USA.
- 2022 EPH 701 Research Methods: Causal Inference in Prevention Science. University of Miami.
USA.

Instructor

- 2015 - PSI 122: Quantitative Methods III. Department of Psychology, Universidad
2018 de El Bosque. Colombia.
- 2015 - PSY 131: Program evaluation. Department of Psychology, Universidad de El
2018 Bosque. Colombia.

Workshops

- 2024-02 Machine Learning for Classification Problems. Fundación Universitaria Konrad
Lorenz, Colombia.
- 2024-02 Programming with Python. University of Miami. USA.
- 2024-02 Machine Learning Modeling with the R *Tidyverse* Ecosystem. Florida
International University. USA.
- 2024-01 Mastering Effective Data Visualization with ggplot2 in R: A Hands-on
Workshop for Social Work Researchers. USA.
- 2023-12 Imbalanced data in Machine Learning Modeling. University of Miami. USA.

- 2023-11 Introduction to Machine Learning. ICFES. Colombia.
- 2023-11 Creating tables in R. Universidad Nacional. Colombia.
- 2023-08 Regression Techniques for Classification Problems. Universidad de los Andes, Colombia.

Publications

Journal Articles (peer reviewed)

1. **Cardozo, F.**, Brown, E. C., Mejía-Trujillo, J., & Pérez-Gómez, A. (2023). Moderated mediation of motivation and self-efficacy in a brief motivational interviewing intervention to reduce youth alcohol use. *Drugs: Education, Prevention and Policy*, 0(0), 1--7. <https://doi.org/10.1080/09687637.2023.2167649>
2. Brown, E., Montero-Zamora, P., **Cardozo, F.**, Reyes, M., Briney, J., Mejía-Trujillo, J., & Gómez, A. (2021). A comparison of cut points for measuring risk factors for adolescent substance use and antisocial behaviors in the U.S. and Colombia. *International Journal of Environmental Research and Public Health*, 18, 470. <https://doi.org/10.3390/ijerph18020470>
3. Eisenberg, N., Brown, E., Mez, A., Mejía-Trujillo, J., Paredes-Aguilar, M., **Cardozo, F.**, Maipo, S., & Guttmannova, K. (2020). Community utilization of risk and protective factor data for prevention planning in Chile and Colombia. *Health Promotion International*, 2020, 1--13. <https://doi.org/10.1093/heapro/daaa075>
4. Reyes, M., Pinto-Gómez, C., **Cardozo, F.**, Pérez-Gómez, A., Mejía-Trujillo, J., & Toro, J. (2020). Evaluation of the prevention program brief intervention based on motivational interviewing in Colombian adolescents. *International Journal of Mental Health and Addiction*, 18, 1--11. <https://doi.org/10.1007/s11469-019-0057-3>
5. Pérez-Gómez, A., **Cardozo, F.**, & Salcedo-Tocarruncho, L. (2020). Association between psychoactive substance abuse and health disorders in Colombian problem drug users: Second study. *International Journal of Mental Health and Addiction*, 18. <https://doi.org/10.1007/s11469-018-9881-0>
6. Montero-Zamora, P., Reyes, M., **Cardozo, F.**, Brown, E., Gómez, A., Mejía-Trujillo, J., Toro, J., & Paredes, M. (2020). Adolescent substance use and its association with risk and protective factors. An exploratory analysis of the large-scale school survey of Comunidades que se Cuidan, Colombia. *Adicciones*, 32, 105--115. <https://doi.org/10.20882/adicciones.1083>
7. Pérez-Gómez, A., Lanziano, C., Reyes, M., Mejía-Trujillo, J., & **Cardozo, F.** (2018). Perfiles asociados al consumo de alcohol en adolescentes colombianos. *Acta Colombiana de Psicología*, 21, 258--281. <https://doi.org/10.14718/ACP.2018.21.2.12>
8. Reyes, M., Mejía-Trujillo, J., Gómez, A., **Cardozo, F.**, Pinto, C., & Pinto Gómez, J. C. (2018). Effectiveness of a brief intervention based on motivational interviewing in Colombian adolescents. *Psicologia: Teoria e Pesquisa*, 33. <https://doi.org/10.1590/0102.3772e33421>

Books and Book chapters

1. **Cardozo, F.**, & Molano, A. (2016). Análisis estadísticos. Elementos fundamentales de análisis estadísticos en SPSS. In L. García & J. Escobar (Eds.), *Análisis estadísticos. Elementos fundamentales de análisis estadísticos en SPSS* (pp. 101--108). Editorial Universidad El Bosque.
2. Pérez-Gómez, A., Mejía-Trujillo, J., Reyes-Rodríguez, M. F., & **Cardozo, F.** (2015). Consumo de alcohol en menores de 18 años en Colombia: 2015. Segundo estudio en siete capitales y dos municipios pequeños. (p. 204). Dupligráficas Ltda. <http://nuevosrumbos.org/wp-content/uploads/2015/12/Consumo-de-Alcohol-en-menores-de-edad-en-Colombia-2015.pdf>

Conference Presentations

1. **Cardozo, F.**, Eric C. Brown., Scoppetta, Orlando. (2024). Evaluating the Impact of Marijuana on Adolescent Aggression: A Population-Based Study in Colombia. Fifth Annual Graduate and Postdoctoral Research Symposium. https://events.miami.edu/event/research_symposium_2024
2. **Cardozo, F.** (2023). Exploring the interrelationships between NIH-funded projects on adolescent alcohol use: A two-mode network analysis. Sunbelt 2023. International Network for Social Network

Analysis. <https://www.insna.org/events/sunbelt-2023>

3. **Cardozo, F.** (2023). Exploring the similarities in parent-child perceptions of drug use risk: The role of genetics and environment. Fifth Annual Graduate and Postdoctoral Research Symposium. https://events.miami.edu/event/research_symposium_2023
4. Balise, R., Nahodyl, L., Calderon, A., & **Cardozo, F.** (2022). How to create publication ready tables in R. Presented at UserR conference. <https://user2022.r-project.org/program/tutorials/>
5. **Cardozo, F.**, & Molano, A. (2021). Ecological factors in friendship relationships and alcohol use in scholars. Presented at Networks 2021: A Joint Conference of Sunbelt and NetSci. <https://doi.org/10.13140/RG.2.2.17630.28487>

Posters (presenter)

1. **Cardozo, F.** & Brown, C. (2023). Data Science and Machine Learning Methodology Dissemination in Latin America. Frost Institute for Data Science and Computing.
2. **Cardozo, F.**, Brown, C., Mejía-Trujillo, J., & Pérez-Gómez, A. (2023). Parent-Youth Correspondence in Perceptions of Risk Factors for Adolescent Drug Use: A Dyadic Analysis. Poster presented at Society for Prevention Research Annual Meeting, SPR. DOI: [10.13140/RG.2.2.25548.59521](https://doi.org/10.13140/RG.2.2.25548.59521)
3. **Cardozo, F.**, Montero-Zamora, P., Brown, C., Ortiz-García, J., & Beaulieu, D. (2023) Cost-Effectiveness Analysis of the Tomando Buenas Decisiones Program to Reduce Family Risk Factors Associated with Alcohol Use. Poster presented at Society for Prevention Research Annual Meeting, SPR. DOI: [10.13140/RG.2.2.28904.03848](https://doi.org/10.13140/RG.2.2.28904.03848)
4. **Cardozo, F.**, Brown, E., Mejía-Trujillo, J., & Pérez-Gómez, A. (2021). Moderated mediation of motivation and self-efficacy in a brief motivational interviewing intervention to reduce youth alcohol use. Poster presented at Society for Prevention Research Annual Meeting, SPR. <https://doi.org/10.13140/RG.2.2.17630.28487>
5. **Cardozo, F.**, Guerrero, P., & Molano, A. (2017). Time-variant effects of friendship change on academic achievement: An exploratory social network analysis in Colombia. Poster presented at Society for Research in Child Development, SRCD. <https://doi.org/10.13140/RG.2.2.17630.28487>
6. **Cardozo, F.**, & Molano, A. (2019). Close friends vs. The norm effect: Effects of proximal and distal alcohol social context. Poster presented at Society for Prevention Research Annual Meeting, SPR. <https://doi.org/10.13140/RG.2.2.11232.23048>

Research Projects

Expanding the Use of Collaborative Data Science at UM: Machine Learning Methodology Dissemination in Latin America.

Funding Source: Institute for Data Science and Computing (IDSC)

Role: Co-PI.

Organization of American States (OAS) - Inter-American Drug Abuse Control Commission (CICAD) and the University of Miami (UM): First Hemispheric Drug Use Prevention Forum

Funding Source: Copeland Foundation Award (DPHS Internal Application).

Grant #GR0153355 (Award # CFA02-2020).

Role: Graduate Research Assistant.

University of Miami: Dyadic analyses of parent-child perceptions of risk.

Funding Source: Prevention Education Research in Latin America.

Role: Graduate Research Assistant.

University of Miami: Cost-effectiveness analysis of Tomando Buenas Decisiones: A prevention program to reduce alcohol use in adolescents.

Funding Source: Prevention Education Research in Latin America.

Role: Graduate Research Assistant.

Programming

Skills

Software: *Mplus*, Stata, Excel, SPSS, Nvivo.
Programming Languages: R, Python, Julia, JavaScript.
Reproducible Report: Quarto, Markdown/Rmarkdown, R Shiny Apps, Jupyter Notebook, LaTeX.
DevOps: Git, GitHub.
Web development: Hugo, Blogdown, GitHub Pages, Netlify, CSS, React, HTML.

R Packages development

2023 [BreakNBuild](#): Optimize Machine Learning Models with Dynamic Data Splits.
2022 [DocumentData](#): tools to document data sets.
2022 [ChessOlympiad](#): A collection of datasets to practice multilevel models.

Interactive applications

2022 Tutorial: How to create pretty tables in R. University of Miami.
2022 [Shiny application](#): Simulation based app to identify reporting bias.
2022 Tutorial: Pivot dataset to long and wide format. University of Miami.
2022 Web pages: Underage Drinking Prevention Toolkit. University of Miami.

Professional Memberships

2023-present: rOpenSci. Transforming science through open data, software & reproducibility.
2023-present: Software Carpentry. Teaching researchers the computing skills.
2022-present: Society for Prevention Research. SPR.
2021-present: International Network for Social Network Analysis. INSNA.

Honors

2023 Nomination Graduate Teaching Assistant Award
2020 Scholarship for Doctoral Studies Fulbright
2016 Academic Scholarship IRENEO ROSSIER. Universidad de los Andes

Languages

Spanish, English