

# Francisco Cardozo

Miller School of Medicine - University of Miami, Miami, Florida  
mail: [foc9@miami.edu](mailto:foc9@miami.edu) | web: <https://focardozom.github.io/>

## Education

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### *Education*

2020-present:

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

2018:

MS 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

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### *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

Spring	Sciences, University of Miami
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	CBPC1069: What is prevention science.
2023	CBPC1066: Causal Inference in Public Health (U. de los Andes)
2023	CISO 4604: Guest lecture in Causal Inference (U. de los Andes)
2019	EDUC 4026: Guest lecture in Moderation in Regression (U. de los Andes)
2017	EPH 752: Guest lecture in Social Network Analysis (University of Miami)
2015	EPH 752: Guest lecture in Confirmatory Factor Analysis (University of Miami)

### *Class content development*

2022	EPH 752 Advanced Research Methods: Software Integration for Data Analysis
2022	EPH 752 Advanced Research Methods: Dyadic Data Analysis
2022	EPH 752 Advanced Research Methods: Monte Carlo Simulation to Estimate Power
2022	EPH 701 Research Methods: Causal Inference in Prevention Science

### *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

*\*\*to present*

2024**	Mastering Effective Data Visualization with ggplot2 in R: A Hands-on Workshop for Social Work Researchers. USA
2023	Unbalanced data in Machine Learning Modeling. University of Miami. USA
2023	Introduction to Machine Learning. ICFES. Colombia.
2023	Create tables in R. Universidad Nacional. Colombia
2023	Regression Techniques for Classification Problems. Universidad de los Andes, Colombia.

## **Publications**

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### *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. *Psicología: Teoría 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.** (2023). Exploring the interrelationships between NIH-funded projects on adolescent alcohol use: A two-mode network analysis. To present at Sunbelt 2023. International Network for Social Network Analysis. <https://www.insna.org/events/sunbelt-2023>
2. **Cardozo, F.** (2023). Exploring the similarities in parent-child perceptions of drug use risk: The role of genetics and environment. To present at Fifth Annual Graduate and Postdoctoral Research Symposium. [https://events.miami.edu/event/research\\_symposium\\_2023](https://events.miami.edu/event/research_symposium_2023)
3. Balise, R., Nahodyl, L., Calderon, A., & **Cardozo, F.** (2022). How to create publication ready tables in R. Presented at UseR conference. <https://user2022.r-project.org/program/tutorials/>
4. **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

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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

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### *Skills*

Software: *Mplus*, Stata, Excel, SPSS, Nvivo.

Programming Languages: R, Python, Julia.

Reproducible Report: Quarto, Markdown/Rmarkdown, R Shiny Apps, Jupyter Notebook, LaTeX.

DevOps: Git, GitHub.

Web development: Hugo, Blogdown, GitHub Pages, Netlify, CSS, HTML.

### *R Packages development*

2022 DocumentData: A package 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 app to analyze reporting bias in adolescent drug use research.

2022 Tutorial: Pivot dataset to long and wide format. (University of Miami)

2022 Web pages: Underage Drinking Prevention Toolkit. (University of Miami)

## Professional Memberships

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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

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2023 Nomination Graduate Teaching Assistant Award

2020 Scholarship for Doctoral Studies Fulbright

2016 Academic Scholarship IRENEO ROSSIER. Universidad de los Andes

## Languages

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Spanish, English