DUNCAN J. MAYER, Ph.D.

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Personal Website · Github · LinkedIn · ORCID

PROFESSIONAL SUMMARY

I am a social scientist and statistician with experience designing and leading projects with academic, government, and private sector stakeholders, in research, consulting, and technical assistance across a range of policy areas in health and human services. I excel at research dissemination and have communicated results and recommendations to audiences with a range of technical sophistication.

I am skilled in methodologies used throughout the sciences, including epidemiological and econometric approaches. I use a modern computational workflow including version control, and am literate in R, SQL, as well as domain specific languages. I can quickly orient myself to new projects, and have experience working with diverse data sources: structured and unstructured data, as well as relational databases, administrative data, and surveys.

SKILLS

Quantitative Longitudinal Data Analysis, Hierarchical Models (rich parameterizations), Spatial Statistics, Bayesian Methodologies, Model Criticism

Qualitative: Focus Groups, Interviews, Content Analysis, and Case Studies

Programming: R (8 years) | SQL (4 years) | Stan (3 years)

PROFESSIONAL EXPERIENCE

BeVera Solutions

Atlanta, GA

Health Statistician (full-time)

Sept. 2022 – Present

In a client facing role as a statistician at a data science consulting firm I contributed to project proposals, provided ongoing statistical support, and led and managed the methodological development of studies addressing internal questions for the Centers for Disease Control and Prevention. I managed and maintained a large administrative database of demographic and vaccination information (all US federal, jurisdictional, and pharmacy records) to monitor and evaluate public health programs. I collaborated with CDC staff to elicit important questions and understand programs. I constructed and validated datasets, merged administrative and public data, and led studies of health equity within federal agencies using modern computational methods.

Case Western Reserve University

Cleveland, OH

Research fellow (full-time)

Aug. 2018 - June. 2022

As a research fellow with the Center on Poverty and Community Development I developed and led a research portfolio focused on novel quantitative methodologies, program evaluation, and empirical studies of the distribution of community resources using modern computational methods. I geocoded and merged 10 years of data from disparate sources (APIs, administrative records), and estimated hierarchical models which account for spatial and non-spatial heterogeneity to study juvenile delinquency, child maltreatment, and infant mortality. I also delivered technical assistance, methodological support, and consultation for a range of evaluative projects for governments and nonprofit stakeholders. I disseminated these results in academic journals and presentations to academic and external audiences.

The Institute for Public Policy and Economic Development

Wilkes-Barre, PA

Research Analyst (full-time)

July 2017 – June 2018

As a research analyst at a community based research organization I co-authored and led data analysis for funded empirical research projects including an analysis of the region's workforce trends using model-based projections of workforce needs, an impact evaluation of apprenticeship and early education programs using administrative data, and out-migration of college graduates using survey data. I ran focus groups as part of

needs assessments for the United Way and the Area Agency on Aging. I regularly provided consultation and technical assistance to health and human service oriented nonprofits and foundations, including evaluation capacity building by developing implementation and monitoring plans.

Marywood University

Scranton, PA

Research Assistant (part-time)

January 2017 – July 2017

While completing a masters degree I provided quantitative methodological support for a case control study, with a probability sample, of behavioral interventions and expulsion rates in childcare centers across northeast Pennsylvania. I managed the study's data collection, including administrative and survey data, led data analysis and visualization.

United Way of Lackawanna, Wayne, and Pike Counties

Scranton, PA

Community Impact Intern (Part-time)

Sept. 2016 - June 2017

While completing a masters degree I worked with the region's United Way to provide technical assistance to grantees, enhancing their data capture and evaluation efforts. I analyzed educational assessments for change over time, educated partners on census products to understand the region, and developed briefs and primers for task forces focused on a range of social and health issues.

The Institute for Public Policy and Economic Development

Wilkes-Barre, PA

Research Intern (Part-time)

Dec. 2016 – June 2017

In the time between finishing my bachelors and beginning my masters degree, I worked with a community based research organization and contributed to funded research projects by collecting and analyzing survey data related to child welfare workforce development and job satisfaction, and developing literature reviews related to kindergarten truancy and the effect of the coal economy on northeast Pennsylvania.

United Neighborhood Centers of Northeast Pennsylvania

Scranton, PA

Social Work Intern (Part-time)

Dec. 2015 – June 2016

During course work for a bachelors degree I worked with a local human service agency providing case management for clients in emergency situations such as utility shut-offs, eviction, and foreclosure.

Prevention Point Philadelphia

Philadelphia, PA

Social Work Intern (Full-time)

May. 2015 - August 2015

While completing a bachelors degree I worked with a community health organization focused on harm reduction and substance use. I provided case management to a rotating caseload of 5-10 clients in a medication assisted treatment program, distributed resources for wound care and safe injection, and helped manage inventory in the syringe exchange program.

EDUCATION

Case Western Reserve University PhD in Social Welfare Dissertation: Essays on Community-Organization Dynamics	Cleveland, OH August 2023
Marywood University Masters of Social Work Thesis: Evaluation Capacity; Structures, Stakeholders, Attitudes, and Environment	Scranton, PA May 2017
Bachelors of Social Work	May 2015
SELECT HONORS	
Case Western Reserve University Social Justice Institute Research Fellow	2022-2023
Association for Research on Nonprofit Organizations and Voluntary Action Doctoral Fellow	2022
Jack, Joseph and Morton Mandel School of Applied Social Sciences Research Fellow	2018-2022

PUBLICATIONS

Peer-Reviewed Publications

Mayer, D. J. (conditionally accepted). Connecting Founding and Dissolution; A Demographic Study of The US Nonprofit Sector. *Public Administration Review*.

Mayer, D. J. (in press). Spatial Patterns of Nonprofit Founding; Toward a Local Ecology. *Nonprofit and Voluntary Sector Quarterly*.

Mayer, D. J. (2024). Lead and Delinquency Rates; A Spatio-Temporal Perspective. *Social Science and Medicine*. DOI: 10.1016/j.socscimed.2023.116513

Mayer, D. J., Groza, V. (2023). Promoting Children's Rights in Program Evaluation. *American Journal of Evaluation*. DOI: 10.1177/10982140221134621

Mayer, D. J., Fischer, R. L. (2023). Teaching Spatial Data Analysis; A Case Study with Recommendations. *Nonprofit Policy Forum*. DOI: 10.1515/npf-2022-0044

Mayer, D. J. (2023). Understanding Location and Density; A Spatial Analysis of Cuyahoga County Ohio's Nonprofit Sector. *Nonprofit and Voluntary Sector Quarterly*. DOI: 10.1177/08997640231171074

Mayer, D. J., Fischer, R. L. (2023). Exploring Niche Alteration in Nonprofit Organizations. *Administration and Society*. DOI: 10.1177/00953997231165255

Mayer, D. J. (2023). Social Capital and the Nonprofit Infrastructure; An Ecological Study of Child Maltreatment. *Journal of Community Psychology*. DOI: 10.1002/jcop.22984

Mayer, D. J. (2023). Understanding Social Disorganization and the Nonprofit Infrastructure; An Ecological Study of Child Maltreatment Rates. *Social Currents*. DOI: 10.1177/23294965231159317

Mayer, D. J., Fischer, R. L. (2023). Exploring Data Use in Nonprofit Organizations. *Evaluation and Program Planning*. DOI: 10.1016/j.evalprogplan.2022.102197

Mayer, D. J. (2022). Simmer Down Now! A Study of Revenue Volatility and Dissolution in Nonprofit Organizations. *Nonprofit and Voluntary Sector Quarterly.* DOI: 10.1177/08997640221126147

Mayer, D. J., Fischer, R. L. (2022). Can a Measurement Error Perspective Improve Estimation in Neighborhood Effects Research? A Hierarchical Bayesian Methodology. *Social Science Quarterly*. DOI: 10.1111/ssqu.13190

Manuscripts Under Review

Mayer, D. J.(under review). Risk Society on Rails: Area Deprivation and Train Accidents Involving Hazardous Materials. *Environmental Justice*.

Mayer, D. J. (under review). Spatial Disparities in Infant Mortality: The Role of Neighborhood Characteristics. *Journal of Maternal and Child Health*.

Mayer, D. J. (under review). Revealed Preference for Nonprofit Organizations; A Hedonic Price Analysis. Voluntas.

Mayer, D. J. (under review). Exploring Variation in the Relationship Between Deprivation and the Density of Human Service Nonprofits. *Administration and Society*.

Manuscripts In Preparation

Nonprofit Density and County Government Discourse: Insights from a Structural Topic Model

Environmental Justice through Organization: Nonprofits and the Reduction of Childhood Lead Exposure

Book Chapters and Reviews

Fischer, R. L., **Mayer, D. J.** (2022) Nonprofit Management: Beyond Managerialism. In W. Brown, M. Hale (eds). *Preparing Nonprofit Leaders: Contemporary Perspectives.* Routledge. ISBN: 9781032277806

Fischer, R. L., **Mayer, D. J.** (2020). Macro Social Work Practice: Working for Change in a Multicultural Society. *Journal of Teaching in Social Work*. DOI: 10.1080/08841233.2020.1809257

Select Professional or Technical Reports

Fischer, R., Mansoor, D., **Mayer, D. J.** (2020). A Study of the Educational Needs of Fundraising and Grant Making Professionals in Northeast Ohio.

Atwell, M., Fischer, R., L., Chan, T, **Mayer, D. J.**, Henderson, M. (2019). Year Two Gap Analysis: Accountable Health Communities. The Center on Poverty and Community Development.

Ooms, T., Chew, A., **Mayer, D. J.** (2018). Senior Needs Assessment: 2018. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., **Mayer, D. J.**, Ritter, C. (2018). Berwick Community Needs Assessment. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., McCormick, E., **Mayer, D. J.** (2018). The Intersection of Transit and Land Use. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., **Mayer, D. J.**, McCormick, E. (2018). Social Determinants of Health. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., **Mayer, D. J.**, McCormick, E. (2018). Health Literacy: A Public Health Challenge. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., **Mayer, D. J.**, McCormick, E. (2018). What's Next? A Technical Report on 2018 Post-Graduation Polls. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., **Mayer, D. J.**, McCormick, E. (2018). The Nonprofit Social Service Sector in Luzerne and Lackawanna Counties. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., McCormick, E., **Mayer, D. J.** (2018). Workforce Trends and Challenges in Northeastern Pennsylvania. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., McCormick, E., **Mayer, D. J.** (2018). The Behavioral Health Initiative: A Report on the Behavioral Health Workforce. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Ooms, T., Chew, A., McCormick, E., **Mayer, D. J.** (2017). Public Policy and Civic Engagement: A Technical Report on 2017 Polls. Wilkes-Barre, PA: The Institute for Public Policy and Economic Development.

Mayer, D. J. (2017). Preschool and Dibels Assessments. Scranton, PA: United Way of Lackawanna and Wayne Counties.

MEDIA

"Mandel School's Duncan Mayer, Victor Groza write paper on children's rights in program evaluation", featured in Case Western Reserve University's "the Daily." September 1st, 2023.

"Mandel School's Duncan Mayer explores nonprofit location and density", featured in Case Western Reserve University's "the Daily." June 23rd, 2023.

"Mandel School's Duncan Mayer writes about child maltreatment", featured in Case Western Reserve University's "the Daily." May 12th, 2023.

"Duncan Mayer writes about revenue volatility", featured in Case Western Reserve University's "the Daily." December 2nd, 2022.

PRESENTATIONS

Presentations at National Conferences

Mayer, D. J. (2022, accepted but not presented). Understanding Social Disorganization and the Nonprofit Infrastructure; An Ecological Study of Child Maltreatment Rates. The Society for Social Work Research. Juried poster presentation.

Mayer, D. J. (2022). Revealed Preference for Nonprofit Organizations; A Hedonic Price Analysis. Annual Conference of the Association for Research on Nonprofit Organizations and Voluntary Action (ARNOVA). Juried paper presentation.

Mayer, D. J. (2022). Nonprofit Response to Neighborhood Conditions: Incorporating Space-Time Heterogeneity. Annual Conference of the Association for Research on Nonprofit Organizations and Voluntary Action (ARNOVA). Juried paper presentation.

Mayer, D. J., Fischer, R. L. (2021). Examining Revenue Volatility in Nonprofit Organizations with a Discussion of Measurement and Portfolio Representation. Annual Conference of the Association for Research on Nonprofit Organizations and Voluntary Action (ARNOVA). Juried paper presentation.

Presentations at Local Conferences

Mayer, D. J. (2022). Understanding the Geography of Cuyahoga County's Nonprofit Sector Through Form-990 Data. Data Days Cleveland. Juried oral presentation.

Mayer, D. J. (2017). Evaluation Capacity: Structures, Stakeholders, Attitudes, and Environment. Annual Conference of the National Association of Social Workers, Pennsylvania. Juried poster presentation.

TEACHING (AND RELATED) EXPERIENCE

Instructor of Record

Case Western Reserve University

Evidence-informed practice (SASS 528)

Theoretical contexts shaping community practice (SASS 534)

Masters of Social Work: 2021 (in-person), 2022 (online)

Masters of Social Work: 2021 (online), 2022 (in-person)

Poverty, wealth building, and social entrepreneurship	
(SASS 367)	

Course Development

Case Western Reserve University

Working with data for organizational empowerment (SASS 500)

Community practice policy: Analyzing and changing social policy (SASS 561)

Masters of Social Work, Certificate in Data Sciences for Social Impact, Approved 2021 Masters of Social Work, Approved 2020 (online)

Social Work Minor: 2020 (online)

Teaching Assistant

Case Western Reserve University

Data-based decision making (SASS 410)

Theoretical contexts shaping community practice (SASS 534)

Community practice policy: Analyzing and changing social policy (SASS 561)

Marywood University

Social work research: Implementation and analysis (SW 702)

Masters of Nonprofit Organizations, 2020 (online)

Masters of Social Work, 2019-2021 (online/in-person)

Masters of Social Work, 2019-2021 (online/in-person)

SERVICE AND LEADERSHIP

Case Western Reserve University Social Welfare PhD Executive Committee

2017-2019

Masters of Social Work, 2017 (in-person)

Case Western Reserve University Masters of Social Work Community Practice Curriculum Committee 2019

Ad hoc Reviewer: Nonprofit Management and Leadership, City and Community, Nonprofit and Voluntary Sector Quarterly