

Derick S. Baum

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Population Studies and Training Center, Brown University – Providence, RI 02912 |

E-mail address: derick_baum@brown.edu | Personal website: derickbaum.com |

GitHub: github.com/derick-baum/ | ORCID: <https://orcid.org/0000-0001-7539-6749>

EMPLOYMENT

University of Georgia, Department of Sociology
Assistant Professor

Athens, GA
Start Date: August 2026

Brown University, Department of Sociology
Postdoctoral Research Associate (Quantitative Research Methods Fellowship)

Providence, RI
2024-present

EDUCATION

Harvard University
Ph.D. in Sociology, Presidential Scholar

Cambridge, MA
2018-2024

Dissertation: “Developments in Aggregate Relational Data”

Committee: Alexandra Killewald, Peter V. Marsden (Chair), Xiang Zhou

A.M. in Sociology

2018-2021

University of California, Santa Barbara

B.A. in Sociology and Mathematics (double major), *Summa cum laude*; Phi Beta Kappa

Santa Barbara, CA
2013-2017

RESEARCH AND TEACHING INTERESTS

Quantitative and computational methods, social network analysis, Bayesian inference, causal inference, survey methods, social capital

PEER-REVIEWED ARTICLES AND BOOK CHAPTERS

Baum, Derick S. 2025. “Explaining Contact Patterns in Acquaintanceship Networks: A New Covariate-Based Model.” *Social Networks* 83:79-91. <https://doi.org/10.1016/j.socnet.2025.05.005>.

Marsden, Peter V., and **Derick S. Baum**. 2024. “Occupational Selection and the Reliability of Position Generator Measures of Social Capital.” *Social Networks* 79:34–47. <https://doi.org/10.1016/j.socnet.2024.05.001>.

Baum, Derick S., and Peter V. Marsden. 2023. “Uses and Limitations of Dichotomous Aggregate Relational Data.” *Social Networks* 74:42–61. <https://doi.org/10.1016/j.socnet.2023.02.001>.

Winner of the 2023 Best Student Paper Award from the International Network for Social Network Analysis

Baum, Derick S., and Xiang Zhou. 2022. “rbw: An R Package for Constructing Residual Balancing Weights.” *The R Journal* 14(3):174–92. <https://doi.org/10.32614/RJ-2022-049>.

Marsden, Peter V., Maleah Fekete, and **Derick S. Baum**. 2021. “Egocentric Network Studies within the General Social Survey: Measurement Methods, Substantive Findings, and Methodological Research.” Pp. 519–52 in *Personal Networks: Classic Readings and New Directions in Egocentric Analysis*, edited by B. Pescosolido, B. L. Perry, E. B. Smith, and M. L. Small. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108878296.038>.

WORKING PAPERS (DRAFTS AVAILABLE UPON REQUEST)

Baum, Derick S., and Xiang Zhou. “Explaining Disparities at Quantiles: An Augmented Kitagawa-Oaxaca-Blinder Decomposition.” Revised & Resubmitted at *Sociological Methodology*.

Baum, Derick S., Ester Fanelli, Elly Field, Susan E. Short, Meghan Zacher. “Beyond Linear Mean-Gap Models: A Generalized Kitagawa-Oaxaca-Blinder Decomposition of Levels and Change.”

Baum, Derick S., Craig M. Rawlings, Clayton Childress. “Assessing the Sociopolitical Divide: Affinity and Avoidance Patterns in Close Personal Ties.”

Baum, Derick S., Rafael H. M. Pereira, Dennis M. Feehan. “Segregation in Acquaintanceship: Space, Homophily, and Network Structure.”

Baum, Derick S. “Assessing the Goodness of Fit of Models for Analyzing Aggregate Relational Data.”

Baum, Derick S. “The Reliability of Items and Measures for Aggregate Relational Data.”

Short, Susan E., Ester Fanelli, Meghan Zacher, and **Derick S. Baum**. “The Contribution of Education to the Growing Gender Divide in Feelings Towards Feminists.”

SOFTWARE DEVELOPMENT

Zhou, Xiang, and **Derick S. Baum**. “rbw: Residual Balancing Weights for Marginal Structural Models.”
<https://cran.r-project.org/web/packages/rbw/index.html>

Bojanowski, Michał, and **Derick S. Baum**. “stansum: Bayesian Models for Aggregated Relational Data.”
<https://github.com/coalesce-lab/stansum>

TEACHING

Head Instructor, Brown University

SOC 2071: Introduction to Social Network Analysis (Graduate) Spring 2025, Fall 2025
Overall instructor evaluation: 4.85/5.00 (n = 26)

Teaching Fellow, Harvard University

SOCIOL 1156: Statistics for Social Sciences (Undergraduate) Spring 2023
Overall instructor evaluation: 4.62/5.00 (n = 13)
Certification of Distinction in Teaching, Derek Bok Center for Teaching and Learning

SOCIOL 2275: Social Network Analysis (Graduate) Fall 2022
Overall instructor evaluation: 4.92/5.00 (n = 12)
Certification of Distinction in Teaching, Derek Bok Center for Teaching and Learning

PSY 1900: Introduction to Statistics for the Behavioral Sciences (Undergraduate) Spring 2022
Overall instructor evaluation: 4.50/5.00 (n = 12)
Certification of Distinction in Teaching, Derek Bok Center for Teaching and Learning

SOCIOL 2245: Causal Inference for the Social Sciences (Graduate) Spring 2021
Overall instructor evaluation: 4.78/5.00 (n = 9)
Certification of Distinction in Teaching, Derek Bok Center for Teaching and Learning

SOCIOL 2202: Intermediate Quantitative Research Methods (Graduate) Fall 2020, Fall 2021

Overall instructor evaluation: 4.56/5.00 (n = 9)

AWARDS AND ACCOMPLISHMENTS

Harvard Griffin Graduate School of Arts and Sciences Dissertation Completion Fellowship	2023-2024
Harvard Griffin Graduate School of Arts and Sciences Professional Development Fund	2023
Best Student Paper Award from the International Network for Social Network Analysis	2023
Presidential Scholar in the Harvard Griffin Graduate School of Arts and Sciences	2018-2024
Award conferred to a small group of top prospective Ph.D. students in the humanities and social sciences. Awardees receive additional financial support in years one, two, and the dissertation completion year.	
Certification of Distinction in Teaching from the Derek Bok Center for Teaching and Learning at Harvard University	2021-2023
Academic Excellence Award from the UCSB Honors Program	2017
Best Undergraduate Paper in Sociology from the UCSB Sociology Department	2017
Distinction of <i>Summa Cum Laude</i> from the UCSB Sociology Department	2017

CONFERENCES

Baum, Derick S., Ester Fanelli, Elly Field, Susan E. Short, Meghan Zacher. 2026. "Beyond Linear Mean-Gap Models: A Generalized Kitagawa-Oaxaca-Blinder Decomposition of Levels and Change."

Forthcoming Oral Presentation at the Population Association of America's (PAA) Annual Meeting.

Baum, Derick S., Rafael H. M. Pereira, Dennis M. Feehan. 2026. "Segregation in Acquaintanceship: Space, Homophily, and Network Structure."

Forthcoming Oral Presentation at the Population Association of America's (PAA) Annual Meeting.

Baum, Derick S. 2025. "The Reliability of Items and Measures for Aggregate Relational Data."

Oral Presentation at the Sunbelt Network Conference.

Baum, Derick S., and Xiang Zhou. 2025. "Explaining Disparities at Quantiles: An Augmented Kitagawa-Oaxaca-Blinder Decomposition."

Oral Presentation at the Population Association of America's (PAA) Annual Meeting.

Short, Susan E., Ester Fanelli, Meghan Zacher, and **Derick S. Baum**. 2025. "The Contribution of Education to the Growing Gender Divide in Feelings Towards Feminists."

Oral Presentation by Susan E. Short at the Population Association of America's (PAA) Annual Meeting.

Derick S. Baum. 2021. "Uses and Limitations of Dichotomous Aggregated Relational Data for Estimating Personal Network Size."

Oral Presentation at the 3rd North American Social Networks Conference (NASN).

SERVICES

External Consultant, PATCHWORK Project at the Autonomous University of Barcelona 2023-present

Consulted on questionnaire design for a European Union-funded project investigating social integration in five European countries through cross-national surveys.

Member of the Best Student Paper Award Committee, International Network for Social Network Analysis 2024

Peer Mentor, Summer Research Opportunities at Harvard 2022-2023

Mentored college students from underrepresented backgrounds interested in pursuing doctoral studies in the humanities and social sciences.

Ad Hoc Reviewer

Demography, Social Networks, Demographic Research, National Science Foundation Proposal Review

ORGANIZATIONS

American Sociological Association 2023-present
Member, Section on Mathematical Sociology

International Network for Social Network Analysis 2023-present

The Institute for Quantitative Social Science at Harvard 2021-2024
Graduate Student Affiliate

UCSB Honors Program 2014-2017

TECHNICAL SKILLS

R, Stan, LaTeX, Stata, Qualtrics

LANGUAGES

English (fluent), Portuguese (native)

REFERENCES

Peter V. Marsden
33 Kirkland Street, Cambridge, MA 02138
pvm@wjh.harvard.edu

Alexandra Killewald
ISR 2030, 426 Thompson Street, Ann Arbor, MI 48109
akillewa@umich.edu

Xiang Zhou
33 Kirkland Street, Cambridge, MA 02138
xiang_zhou@fas.harvard.edu