

JOSHUA BECKER

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EDUCATION

PhD Candidate

Annenberg School for Communication, University of Pennsylvania

Dissertation: The Network Dynamics of Social Influence in the Wisdom of Crowds

Committee: Damon Centola, Sandra Gonzalez-Bailon, Michael Delli-Carpini

Expected Graduation: May, 2018

MA Communication

Annenberg School for Communication, University of Pennsylvania

BA Liberal Arts (Philosophy / History of Math and Science)

St. Johns College, Annapolis, MD St. Johns College, Annapolis, MD

PUBLICATIONS AND WORKING PAPERS

Becker, J., Brackbill, D., & Centola, D. (2017). The Network Dynamics of Social Influence in the Wisdom of Crowds. *Proceedings of the National Academy of Science*, 14 (26), 5070–5076

Becker, J., Brackbill, D., & Centola, D. (2017). The Network Dynamics of Social Influence in the Wisdom of Crowds. *Submitted for Publication*.

Becker, J. (2017). The Emergence of Conventions in Centralized Networks. *Working Paper*.

Zhang, J., Brackbill, D., Yang, S., Becker, J., Herbert, N., & Centola, D. (2016). Support or competition? How online social networks increase physical activity: A randomized controlled trial. *Preventive Medicine Reports*, 4, 453-458.

CONFERENCE PRESENTATIONS

Becker, J. Brackbill, D. Centola, D. The Network Dynamics of Social Influence in the Wisdom of Crowds, *Annual Meeting of the American Sociological Association*, Montreal, Canada, August 2017. (Upcoming)

Becker, J., Brackbill, D., Centola, D. The Network Dynamics of Social Influence in the Wisdom of Crowds, *International Conference on Computational Social Science*, Cologne, Germany, July 2017.

Becker, J., Brackbill, D., Centola, D. An Experimental Study of Critical Mass. *International Conference on Computational Social Science*, Chicago, IL, June 2016.

Becker, J., On Centralization and Collective Decision-Making. *Penn Network Visualization Program*, University of Pennsylvania, June 2016.

Becker, J., Brackbill, D., Centola, D. An Experimental Study of Collective Intelligence. *Collective Intelligence Conference*, New York, NY, June 2016.

Becker, J. & Centola, D., Coordination, exploration, and collective decisions, *Workshop on Information and Networks*, New York, NY, October, 2015.

Becker, J., Collective Decisions as Coordination Processes: The Influence of Hubs, *NetSci 2015*, Zaragoza, Spain, June, 2015.

Becker, J., Collective Decisions as Coordination Processes: The Influence of Hubs, *Computational Social Science Summit*, Chicago, IL, May, 2015

TEACHING EXPERIENCE

2016-2017 Teaching assistant and curriculum design for Damon Centola
Online course: The Network Dynamics of Social Behavior (in progress)

2015 Teaching Assistant for Sandra Gonzalez-Bailon
Undergraduate course: Big Data and Social Networks

2008-2013 Skills Trainer, Interpersonal Communication Skills
Community Mediation Maryland, Kimmel Center Philadelphia

2005-2011 Youth Educator
Daniel Rothman Religious School, Epigenesis Program

ADDITIONAL TRAINING

2017 Summer Institute in Computational Social Science
Russell Sage Foundation, Princeton University

- 2013-2017 Research Assistant for Damon Centola
Develop web-based experiments and agent-based models with the Network Dynamics Group
- 2015-2016 Research Assistant for Sandra Gonzalez-Bailon
Analyzed influence networks on Turkish twitter with Enes Abanoz

FUNDING

- 2017 Becker, J. and Porter, E. *Harnessing the Wisdom of Crowds to Increase Political Knowledge*. Russell Sage Foundation.
- 2017 Becker, J. *Can Social Influence Improve Financial Forecasting?* Russell Ackoff Doctoral Fellowship, Wharton Risk Center.
- 2016 Centola, D., Zhang, J., Aysola, J., Becker, J., and Brackbill, D. *Improving Medical Decisions Making Trough the Wisdom of Crowds*. Robert Wood Johnson Pioneer Grant.

TECHNICAL SKILLS

- Coding R, Java, NetLogo, Full Stack Web Development
- Data Analysis Network analysis, statistics, machine learning