

Yuan Hsiao

Ph.D. candidate, Department of Sociology

Master's student, Department of Statistics

Contacts

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Education

2017-

Ph.D. candidate, Sociology, University of Washington, Seattle, WA

Dissertation Committee: Steven Pfaff (chair), Katherine Stovel, Emilio Zagheni, Jevin West

2016-

Master's student, Statistics, University of Washington, Seattle, WA

Master's Committee: Jonathan Wakefield (chair), Emilio Zagheni

2013-2015

Master of Arts, Sociology, University of Washington, Seattle, WA

2006-2010

Bachelor of Arts, Sociology, National Taiwan University, Taipei, Taiwan

Research Interests

Social networks, Social media, Collective action, Quantitative methods, Demography

Specialization Certificates

- Certificate on Demographic Methods, Center for Studies in Demography and Ecology, University of Washington
- Certificate on Concentration in Social Statistics, Center for Statistics and the Social Sciences, University of Washington

Scholarly Publications

(Mainly as social scientist or **Mainly as statistician**)

- Becker, Sascha, **Yuan Hsiao**, Steven Pfaff and Jared Rubin (**Equal Contribution**). "Multiplex Network Ties and the Spatial Diffusion of Radical Innovations: Martin Luther's Leadership in the Early Reformation"
Forthcoming at American Sociological Review (Impact Factor: 5.39)
- **Hsiao, Yuan**. "Evaluating the mobilization effect of online political network structures."
Forthcoming at Social Forces (Impact Factor: 2.29)
- **Hsiao, Yuan** and Scott Radnitz. "Allies or Agitators? Partisanship and Perceptions of Nonviolent Protest."
Forthcoming at Political Communication (Impact Factor: 4.34)

- **Hsiao, Yuan**, Ching-Ling Cheng and Ya-Wen Chiu. 2019. "Gender Network Dynamics in Prosocial and Aggressive Behavior of Early Adolescents." *Social Networks* 58: 12-23. (Impact Factor: 2.95)
- Powell, Tara, Shang-Ju Li, **Yuan Hsiao**, Chloe Ettari, Anish Bhandari, Anne Peterson and Niva Shakya. 2019. "Investigating the aftershock of a disaster: A study of health service utilization and mental health symptoms in post-earthquake Nepal." *International Journal of Environmental Research and Public Health* 16(8): 1369. (Impact Factor: 2.49)
- Li, Zehang, **Yuan Hsiao**, Jessica Godwin, Bryan Martin, Jon Wakefield and Samuel Clark. 2019. "Changes in the Spatial Distribution of the Under Five Mortality Rate: Small-area Analysis of 136 DHS Surveys in 33 Countries in Africa and Asia." *PLoS One* 14(1). (Impact Factor: 2.78)
- **Hsiao, Yuan**. 2018. "Understanding digital natives in contentious politics: explaining the effect of social media on protest participation through psychological incentives." *New Media & Society* 20(9): 3457–3478. (Impact Factor: 4.80)
Paper received UW Sociology Herbert L. Costner best solo-authored paper award
- **Hsiao, Yuan** and Yunkang Yang (**Equal Contribution**). 2018. "Activists on the cloud? An empirical test on commitment for online and offline protest participants." *Information, Communication & Society* 21(7): 996-1013. (Impact Factor: 4.12)
- **Hsiao, Yuan**. 2017. "Virtual ecologies, mobilization, and democratic groups without leaders: Impacts of internet media on the Wild Strawberry Movement." In Dafydd Fell (Ed.) *Taiwan's Social Movements under Ma Ying-jeou: From the Wild Strawberries to the Sunflowers* (pp. 34-53). New York: Routledge.
- **Hsiao, Yuan**. 2011. "How the Internet Impacts Social Movements: A Case Study of the Taiwan Wild Strawberry Movement." *Taiwan Democracy Quarterly* 8 (3): 45-85.
Listed as required reading for over 10 courses

Research under review

(Mainly as social scientist or Mainly as statistician)

- Leverso, John and **Yuan Hsiao**. "Networks of gangs on Facebook: the conditions for online gang antagonism."
Revise and Resubmit at Journal of Research in Crime and Delinquency
- **Hsiao, Yuan**. "Network Diffusion in scenarios of competing behaviors." *Under review*
- **Hsiao, Yuan**, Lee Fiorio, Jon Wakefield and Emilio Zagheni. "Combining Twitter data with official estimates to predict state-to-state migration rates in the US." *Under review*
- **Hsiao, Yuan** and Steven Pfaff. "Oaths, CatNets, and insurgent strategy: The case of the Mau Mau Rebellion." *Under review*
- Powell, Tara, Shang-Ju Li and **Yuan Hsiao**. "An evaluation of physical versus combined mental health interventions for Syrian refugees in Jordan." *Under review*
- Chen, Fang-Yu, Chih-Hsin Sheen, **Yuan Hsiao** and Yi-Chun Chien. "The Composition and Politicization Processes of Taiwanese National Identity." *Under review*

Research under development

(Mainly as social scientist or **Mainly as statistician**)

- **Hsiao, Yuan.** “An investigation of quality and quantity strategies in competitive market networks.”
- Lui, Ching Wu (Lake) and **Yuan Hsiao.** “Political event types and the tolerance of violence against bystanders: the case of the Hong Kong Movement.”
- Garimella, Kiran, **Yuan Hsiao** and Kai-Ping Leung. “Understanding power structures in movements: Combining social media data and offline protest events in the Hong Kong Movement.”
- **Radnitz, Scott and Yuan Hsiao.** “A survey experiment on conspiracy theory and political speech.”

Fellowships

- (2019) Presidential Dissertation Fellowship Award. University of Washington Graduate School
- (2018) Research fellow, Lab of digital and computational demography, The Max Planck Institute for Demographic Research, Rostock, Germany
- (2013-2014) Studying Abroad Scholarship, Ministry of Education, Taiwan

Statistical and programming consulting

- (2018-present) Consultant, The Center for Social Science Computation and Research, University of Washington
- (2018) Consultant, Departments of Biostatistics and Statistics consulting services, University of Washington
- (2017) Statistical Consultant, Americares Foundation: Disaster Relief & Global Health Organization, CT, USA

Honors and Grants

- (2019) Center for Studies in Demography and Ecology Service Grant, Center for Studies in Demography and Ecology, University of Washington (\$500)
- (2018) Herbert Costner Award Research Fund. University of Washington, USA (\$5000)
- (2017) UW Population Health Travel Award (\$1500)
- (2017) Travel Grant. UW Graduate School (\$300)
- (2017) Travel Grant. International Association of Communication (\$200)
- (2016) University of Washington Graduate School Distinguished Thesis Award (\$500)
- (2016) UW Sociology Best Master’s Thesis Award
- (2015) Research Grant. Department of Sociology, University of Washington, USA. “Social media and collective action participation: A socio-psychological investigation.” (\$1000)
- (2009-2010) National Science Council Research Project Grants for Outstanding Undergraduate Students, Taiwan. “How the Internet affects Social Movements.” (\$1567)

Research Skills

Statistical Skills	Sociological & Demographic Skills
<p><i>Statistical Programming</i> R, STATA, Mplus, Python</p> <p><i>Statistical Specialization</i> Social Network Analysis Big Data and Machine Learning Text Analysis Longitudinal / Multi-level Modeling Agent-Based Modeling / Simulations Survey Design Structural Equation Modeling Spatial Statistics Bayesian Statistics Survival Analysis</p> <p><i>Statistical Courses</i> STAT 512 Statistical Inference STAT 513 Statistical Inference STAT 529 Sample Survey Techniques STAT 535 Statistical Learning STAT 548 Machine Learning for Big Data STAT 554 Statistical Methods for Spatial Data STAT 564 Bayesian Statistics for the Social Sciences STAT 566 Causal Modeling STAT 567 Statistical Analysis of Social Networks STAT 570 Advanced Regression Methods for Independent Data STAT 571 Advanced Regression Methods for Dependent Data CSSS 505 Review of Mathematics for Social Scientists CSSS 510 Maximum Likelihood Methods CSSS 512 Panel Data CSSS 526 Structural Equation Models CSSS 527 Survey Research Methods CSSS 569 Visualizing Data SOC 504 Social Statistics SOC 505 Social Statistics SOC 506 Quantitative Techniques in Sociology</p>	<p><i>Research Specialization</i> Social networks Digital media Behavioral diffusion Collective action/social movements Demographic methods</p> <p><i>Sociology & Demography Courses</i> SOC 508 Logic of Social Inquiry SOC 510 Seminar on Sociological Theory SOC 511 Classical Sociological Theory SOC 513 Demography and Ecology SOC 518 Stratification SOC 533 Research Methods in Demography SOC 539 Special Topics in Demography: Migration SOC 555 Qualitative Case-Based Research Methods SOC 581 Social Movements SOC 590 Sociology of Exchange SOC 590 Big Data and Population Processes SOC 590 Social Networks</p>

Teaching

Teaching awards

(2018) Award for Best Teaching Assistant, Department of Sociology, University of Washington

Courses taught for award:

Social Statistics I, Social Statistics II, Quantitative Techniques in Sociology,

Teaching experience

Teaching in Statistics	Teaching in Sociology
(2017) Instructor. CSSS 505: Review of Math for Social Scientists, University of Washington	(2016) Teaching Assistant. SOC 331: Population and Society, University of Washington
(2018) Teaching Assistant. CSSS 507/SOC 506: Methodology: Quantitative Techniques in Sociology, University of Washington	(2016) Teaching Assistant. SOC 292: Public Schools in America, University of Washington
(2018) Teaching Assistant. SOC 505: Social Statistics, University of Washington	(2014) Teaching Assistant. SOC 316: Introduction to Sociological Theory, University of Washington
(2017) Teaching Assistant. SOC 504: Social Statistics, University of Washington	(2015) Teaching Assistant. SOC 222: Sociology of Sport, University of Washington
(2017) Teaching Assistant. CSSS 507/SOC 506: Methodology: Quantitative Techniques in Sociology, University of Washington	(2014) Teaching Assistant. SOC 110: Survey of Sociology, University of Washington
(2015) Teaching Assistant. Center for Statistics and the Social Sciences Math Camp. University of Washington (In charge of section on statistical programming)	(2014) Teaching Assistant. SOC 371: Criminology, University of Washington

Invited Talks and Organized Workshops

- (2019) Organizer of ASA preconference “Migration data and models for a better world: Perspectives from social scientists, data scientists and international organizations.” American Sociological Association, New York, USA
- (2018) “Combining Twitter data with official estimates to predict state-to-state migration rates in the US.” The Max Planck Institute for Demographic Research, Rostock, Germany
- (2018) “Social Media, Social Networks, and Social Movements: a network perspective on connective action.” Academia Sinica, Taipei, Taiwan
- (2018) “Network analysis and RSiena – an example-motivated introduction.” College of Education, University of Washington, Seattle, WA, USA

Conference Presentations

- (2020) “Reducing Noncommunicable Diseases Among Syrian Refugees in Jordan: Combining Physical and Mental Health Treatments” Population Association of American annual meeting. Virtually held due to COVID-19
- (2019) “Law and Disorder? Survey Experiment on Perceptions of Protest and Nonviolence.” American Sociological Association Annual Meeting Conference. New York, USA

- (2019) “Estimating US Internal Emigration Flows in a timely way by complementing the American Community Survey with geolocated Twitter Data.” Population Association of American annual meeting, Austin, TX, USA
- (2018) “Collective versus connective action in Black Lives Matter Sacramento: The interaction between network structures, strong/weak ties, and forms of activism.” Young Scholars in Social Movements Conference, Center for the Study of Social Movements, University of Notre Dame, South Bend, IN, USA
- (2017) “Gendered network dynamics of aggressive and prosocial behavior” Center for studies in Demography and Ecology Poster Session, University of Washington
- (2017) “Commitment in the Cloud? Social Media Participation in the Sunflower Movement.” Digital media, political polarization and challenges to democracy: an international symposium, Vienna, Austria
- (2017) “Networks of aggressive and prosocial behavior: Alternative evidence from a Chinese society.” 18th European Conference on Developmental Psychology, Utrecht, Netherlands
- (2017) “Is Commitment Possible in the Cloud? Social Media Participation in the Sunflower Student Movement.” International Communication Association Annual Meeting Conference, San Diego, CA, USA
- (2016) “Social media and collective action: a test of a new structural-cognitive model”. American Sociological Association Annual Meeting Conference. Seattle, WA, USA
- (2015) “Oaths, commitment problems, and insurgent strategy: The case of the Mau Mau Rebellion.” Association for the Study of Religion, Economics, and Culture Conference, Orange City, CA, USA
- (2015) “Oaths, commitment problems, and insurgent strategy: The case of the Mau Mau Rebellion.” Seminar on Cultural, Organizational, Political and Economic Sociology, University of Washington

Reviewer Experience

American Journal of Sociology, New Media and Society, Information, Communication and Society, Social Science Computer Review, EPJ Data Science, Archives of Public Health, Public Opinion Quarterly, Social Movement Studies, International Sociology, Third World Quarterly, The Social Science Journal, Taiwanese Sociology (<台灣社會學>)

Research Assistance

- (2015) Research Assistant. Dr. Ross Matsueda
- (2015) Research Assistant. Dr. Steven Pfaff
- (2015) Research Assistant. Dr. Samuel Clark

Languages

English, Taiwanese, Mandarin/Chinese, Japanese

Last Updated: Jun 2020