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Social Science Research Beyond the Academy[1] Report

Introduction and Overview

The first ever UMass "Social Science Research beyond the Academy" event took place on April 24th, 2015, held by the Institute for Social Science Research in partnership with the Graduate School and Isenberg School of Management. This event was supported by a grant from the University of Massachusetts Amherst Graduate School, made possible by President's Enhancement Fund to improve the preparation of graduate students and postdocs for private sector careers. This research exposition and conference was designed to broaden both the research opportunities for UMass faculty and grad students and to provide information to PhD candidates on promising careers outside of academia that fully engage their research skills.

Nearly 100 participants attended the event representing five colleges at UMass: Natural Sciences, Social/Behavioral Sciences, Education, Humanities, and Management. Twenty-five current doctoral candidates were selected by their programs to present a poster at this event to showcase the ways in which their research methods and findings are relevant beyond the academy. The PhD student researchers who presented posters came from many different departments within the five participating colleges at the university (see Appendix). The presenters and other participants had the opportunity at the event to connect with alumni panelists from private sector, non-profit, and government organizations. Two panels of successful PhD alumni discussed their research and careers in government, business, and non-profit organizations. This event provided an opportunity for graduate students and faculty to connect with researchers and administrators who are interested in the value social science research has outside of higher education.

The event was held at the Mullins Center at UMass. The two panels each consisted of four successful social science and management PhD alumni holding positions in a variety of organizations including government organizations like the US Census, a financial consulting company, a firm in the educational research industry, and Information Technology companies like IBM and SAS. Panelists discussed their paths into their current positions outside of academia, how social science research methods are applied in their day-to-day work, and shared advice and guidance to current PhD candidates. All eight panelists viewed and judged 25 posters of current research projects by the selected PhD candidates. At the end of the day, four award

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winners for different categories were selected, as described below. The winners were Samantha Bernecker (Psychology), Kelly Miller (Resource Economics), Tovar Cerulli (Communication), and Isabelle Beaudry (Statistics).

Key Takeaway Points from Panels

We received 20 nominations for alumni panelists from Graduate Program Directors of various PhD programs, including Economics, Communication, Psychology, Political Science, and other programs within social science. These nominees hold positions across various industries. We were honored to be able to invite eight successful alumni from government organizations, consulting firms, the IT industry, the educational research industry, healthcare, and sports media. During the two panel sessions, our distinguished panelists shared their experience in the path to current positions outside of academia, described how skills acquired during PhD study help them in their daily work, and gave advice to attending students. Below is a summary of some key points of advice:

- Seizing opportunities to connect with people is recommended for students who are planning non-academic careers. Networking is important.
- Connect with a mentor who works in the industry intended.
- Informational interviews are a great way to find out what it's like to work in a particular industry. They can also help you figure out how to position yourself (resume style, skills that need to be emphasized, etc.).
- Do your homework before each interview. Find out who is going to be interviewing you, what this person's background is, and what does the position do, etc.
- Show interest during your interview. Nobody wants to hire someone who will be bored doing the job. Always send thank you notes.
- The questions that you ask during your interview are just as important as your answers.
- When applying for a job in a given industry, you have to show them that you 'speak their language.' Search for job postings in that industry and take note of the language that they use (key terms, etc.). Make sure that you use the same language in your resume.
- Social media skills are essential for IT industry as well as consumer marketing
- In the PhD experience, skills learned are more important than the actual topic of study. Important skills include learning research analytics software, paper/report writing skills, and problem solving.
- Research methods and quantitative analysis tools are very important across industries
- Understanding financial statements helps you better understand a client's business and conduct better analysis and consulting

Panelist Biographies

Dr. David W. DeRamus is a founding member of Bates White. He specializes in economic and financial analysis, quantitative modeling, antitrust analysis, pricing analysis, damages analysis, and valuation. Dr. DeRamus has a comprehensive background in industrial organization, international economics, antitrust economics, microeconomics, finance, and statistical analysis. He has a B.A. in Political Science from Duke University and a M.A. and PhD in Economics from UMass Amherst.

Dr. Stephanie Jo Kent is currently working for Baystate Health, Springfield, MA, as a Healthcare Interpreter. She has a comprehensive background in interpretation and communication. She is currently researching organizational development and culture change at Baystate Health and integrating interpreter strike teams in emergency management with Readiness Consulting LLC. Dr. Kent has a B.S. in Sign Language Interpretation at Ball State University and a Master of Education in Social Justice Education and PhD in Communication from UMass Amherst.

Dr. Amy Loomis is Program Director for IBM's Think Academy – an online university designed to push the boundaries of how employees gain and share expertise on strategic initiatives such as cloud computing, analytics, social, mobile and related technologies. The goal of Think Academy is to engage IBM employees and partners in driving IBM's own transformation. Over the last 18 years, Dr. Loomis has been a strategic consultant in emerging technology working in the fields of industry analyst relations, market research and corporate communications. She earned her doctorate from the UMass Department of Communication in 1994.

Dr. Angela Pazzaglia is a Research Associate at Education Development Center, Inc, where she leads intensive recruitment, data collection, and analysis efforts. She is an Institute of Education Sciences' What Works Clearinghouse certified reviewer with expertise in complex quantitative analyses including hierarchical linear modeling, structural equation modeling, and techniques for dealing with missing data. She leads the program of research for the Regional Educational Laboratory (REL) Northeast and Islands' Northeast Rural Districts Research Alliance and is the principal investigator on several studies for REL Midwest's Virtual Education Research Alliance. She is currently conducting a study investigating the associations between student engagement trajectories and student outcomes in online high school courses. s

Dr. Padma Ramanujam is currently working as an Analytics Quality Manager for Revenue Management and Pricing Optimization solution in SAS. Her works primary provide pricing commendation for Hospitality Industries, such as hotels, cruise lines, shows etc. Her team also provide continuous support for hotel chains such as Hilton, Choice, and Extended Stay America. Dr. Ramanujam graduated with an PhD degree in Management Science, at UMass Amherst.

Dr. Heather Lavigne is currently working as a Research Associate at the Education Development Center, Inc. in Waltham, MA. She has extensive experience in educational and psychological research, ranging from randomized controlled trials (RCTs) to correlation analysis with panel data sets, and is trained in a variety of statistical techniques and techniques for dealing with missing data, modeling change over time, and other key aspects of research and evaluation. She contributes her expertise to multiple studies designed to address the priorities of the research alliances of the Regional Educational Laboratory Northeast and Islands (REL-NEI) and serves as a researcher on various projects for the Research, Evaluation, and Policy unit of EDC's Learning and Teaching Division.

Dr. Bradley S. Klein is the longtime architecture editor of "Golfweek" magazine. A former PGA Tour caddie, he holds a Ph.D. in Political Science (UMass, 1984) and taught at the university level for 14 years before "retiring" from academia in 1999 to devote himself to golf writing and design. He has written one book on U.S. defense policy and seven books (and 1,500 articles) on golf course design. Klein is the 2015 recipient of the Donald Ross Award for lifetime achievement by the American Society of Golf Course Architects.

Dr. Marina Vornovitsky joined the Census Bureau in 2009 as an economist in the Labor Force Statistics Branch of the Social, Economic, and Housing Statistics Division. She has worked primarily with wealth and labor force data in the Survey of Income and Program Participation (SIPP), producing multiple reports on household wealth and debt, as well as wealth inequality dynamics in the United States. Marina is currently the head of the Health Insurance and Disability Branch - the branch responsible for producing official estimates of health insurance coverage in the United States. Marina completed her Ph.D. in Economics at the University of Massachusetts at Amherst. She also holds a Bachelor's degree in Economics from American University.

Student Researchers

Twenty-five current doctoral candidates were selected by their programs to participate in this event by showcasing their research. The PhD student researchers came from many different departments and colleges at the university, including Afro-American Studies, Anthropology, Communication, Education Policy and Leadership, Language Literacy and Culture, Management, Marketing, Math Science and Learning Technologies, Political Science, Psychology, Resource Economics, Sociology, Statistics, Teacher Education and School Improvement, and Wildlife, Fish and Conservation Biology. Each researcher presented their current research on a poster judged by eight panelists on four categories: "Most Creative Research Design or Methodology", "Most Applicable Findings for Business, Government, or Non-Profit Organizations", "Most Community Engaged Research", and "People's Choice"

(selected by attendees). In what follows we list the award-winning posters along with reflections from their authors.

Most Creative Research Design or Methodology Poster Award:
"Correcting Prevalence Estimation for Misclassification with Respondent-Driven Sampling Data"
Isabelle Beaudry (Statistics/Math)
Advisors: Tom Braden and Krista Gile

Abstract: Respondent-Driven Sampling (RDS) is a sampling method designed to sample from hard-to-reach human populations connected through social networks. RDS is especially widely used when these small difficult-to-detect populations have potentially large public health impacts. It is often used to sample people who inject drugs, sex workers, and men who have sex with men. RDS therefore involves collecting the sample by peer recruitment. Current prevalence estimators from RDS data rely on a number of assumptions which are often violated in practice. One of such assumptions is that the characteristic of interest, the individual's infection status for example, may be measured accurately. The main contribution of this study is to propose statistically principled approaches to correct for the bias introduced by the misclassification on such characteristic of interest for existing RDS estimators.

"I am extremely grateful to have been given the opportunity to participate to this event. It was great to discuss with fellow students concrete career paths and set of skills often perceived as valuable to the market place. One of the recurrent themes among the panelists was the need for quantitative analysis in the different spheres of their work. This is a great motivation to continue researching statistical methods with applications in social sciences." --Isabelle Beaudry

Most Applicable Findings for Business, Government, or Non-Profit Organizations Poster Award:
"An empirical analysis of residential adoption of energy efficiency by housing types and occupancy"
Kelly Miller (Resource Economics)
Advisor: John Spraggon and Dan Lass

Abstract: The residential sector accounted for roughly 22% of energy end-use in the United States in 2013. This research focuses on policy initiatives to promote energy conservation in this sector (EIA 2015). From an economic standpoint, existing energy conservation policies aimed broadly at homeowners/landlords may not necessarily achieve the desired results efficiently if households that are likely to adopt energy conservation measures without incentive are key program participants. Model results suggest residential energy policies should be targeted at inefficient households that would not independently invest in energy efficient measures.

"The Social Science Research Beyond the Academy Conference provided a unique opportunity within UMass to discuss and get feedback on my work from a non-academic perspective. I thoroughly enjoyed talking with the panelists about their experiences, and received valuable feedback on how to further extend the applications of my research to government and industry."
--Kelly Miller

Most Community Engaged Research Poster Award:
"Crowdsourcing Mental Health" by teaching people to become their own "therapists"
Samantha Bernecker (Psychology)
Advisor: Michael Constantino

Abstract: The poster presented preliminary data from an ongoing program of research to develop a freely-available mental health intervention called "Crowdsourcing Mental Health" (CMH). Users of the CMH intervention will find a partner from within their existing social circles (e.g., friend, family member), and both will take an online course in "talking" and "listening" skills. The pair will then meet weekly and take turns discussing their stressors, using the skills they learned. Though simple, the skills are evidence-based, drawn from research on coping, emotion regulation, and social support. Thus, CMH is expected to effectively increase psychological well-being and reduce mental illness symptoms, all while overcoming the attitudinal (e.g., stigma) and structural (e.g., cost provider availability) barriers that too often impede traditional mental health treatments.

"The very act of holding the event demonstrates that the university regards non-academic careers as valuable and wants to support and nurture those students who aim to pursue such careers. I personally benefitted from the event: I learned that the jobs I want are out there and I am capable of attaining them, and I made connections with professionals who can help me network and find those positions. I also had the opportunity to consider how my current skills transfer and what skills I should continue to develop to prepare for a successful non-academic position. I know that when I embark on my own career, I will look back on this event with gratitude for the influence it had on me, and perhaps someday I'll even be able to return as one of the panelists and impart similarly helpful messages to future generations of PhDs." --Sam Bernecker

People's Choice Poster Award:
"Wolves and Words: Stories Told, Values Held"
Tovar Cerulli (Communication)
Advisor: Donal Carbaugh

Abstract: Wildlife conservation is often perceived as a technical matter of establishing best policies and practices. Yet it depends on reconciling complex, deep-rooted social and cultural conflicts. Hunters—who are typically seen as enemies of predators, but who include predator

advocates—are frequently involved in these conflicts. Examining verbal depictions of wolves and human-wolf relations in the western Great Lakes region, my dissertation analyzes and compares four cultural discourses used in Ojibwe and Euro-American hunting communities, constructing the wolf as (1) a population to be recovered, managed, and controlled, (2) a threat and problem to be dealt with, (3) a relative with a parallel fate, and (4) a co-inhabitant that makes a place wild and whole. The study shows that hunter stereotypes obscure diverse values and beliefs, and that common ground can be found among hunters' dueling discourses.

"I found the event refreshing and thought-provoking. The alumni panel presentations—and alumni interactions with students—were particularly valuable. For me, the key takeaways were (1) appreciation for the diversity of professional roles in which others have successfully employed their academic training, and (2) inspiration to think more broadly and creatively about ways in which I might do the same." --Tovar Cerulli

For a full list of presenters and research poster titles, please refer to Appendix I.

Attendees

Besides panelists and research presenters, 59 attendees joined the event. These faculty members, administrators, and students represent social science units from around the university community. Both Education and Psychology contributed 16.40% of our attendees, while 14.55% and 12.72% came from Sociology and Communication respectively. Other programs or departments represented include Anthropology, Environmental Conservation, Landscape Architecture & Regional Planning, Linguistics, Management, Mathematics, Neuroscience & Behavior, and Resource Economics. The event also welcomed faculty from the College of Education, Office of Research Development, Graduate School, and others parts of the university community.

Summer Workshop follow-up

To follow up on the success of Social Science Research Beyond the Academy, in June 2015 ISSR is offering a summer program in advanced research methods with business and industry applications, also supported by the grant from the Graduate School. This course will be taught by specialists in their field as part of ISSR's mission to promote excellence in social science research at the University of Massachusetts, Amherst and beyond. The course is designed to support the methods and training needs of doctoral students and postdocs in the social sciences, to enhance their education and research success and potential career connections beyond the academy.

Appendix I: Research Presenter List

	Name	Advisors	Department	Title for Posters
1	Samantha (Sam) Bernecker	Michael J. Constantino	Psychology	"Crowdsourcing Mental Health" by teaching people to become their own "therapists"
2	Kelly Miller	Daniel Lass	Resource Economics	An empirical analysis of residential adoption of energy efficiency by housing types and occupancy
3	Margaret Felis	Maria Jose Botelho	Education	Community as curriculum: A multiliteracies approach to the cocreation of heritage language and culture curriculum materials
4	Peter Blackmer		Afro-American Studies	The whole nation will move': Community Activism in Harlem and the Politics of Urban Rebellion
5	Hye Seung Cho	Jacqueline Mosselson	Education	Critical Understanding of Global Citizenship Education in South Korea
6	Laura Heston	Robert Zussman; Joya Misra	Sociology	Recrafting Kinship: The Policy Implications of LGBTQ Family Forms
7	Prerana (Ria) Bharadwaj	Ronnie Janoff-Bulman	Psychology	Fairness and Social Justice: Distinct Moralities
8	Karen Brummond	Donald Tomaskovic-Devey	Sociology	Employment Disparities by Gender: Industry Grades
9	George Pettinico	George R. Milne	Management	The Quantification of Self in Fitness: Understanding The Appeal of This Powerful Consumer Movement
10	Laras Sekarasih	Michael Morgan	Sociology	Restricting, Distracting, and Reasoning: Parental Mediation of Young Children's Use of Mobile Communication Technology
11	Matt Denny	Bruce Desmarais	Political Science	Topic-Conditioned Hierarchical Latent Space Models for Email Data
12	Salma Nazar Khan	Cristine Smith	Education	Institutional Factors that Supports or Hinders the Application of New Knowledge and Skills in Pakistan: A Force Field Analysis
13	Shivani Shukla	Anna Nagurney	Management	A Game Theory Framework for Cybersecurity Investments under Network Vulnerability: Assessing the Economic and Social Effects
14	Miancheng Guo	Martina Nieswandt	Education	Girls' Engagement in Science: Exploring the Influence of Gender Grouping in a Design-Based Science Context
15	Lawrence DeGeest	John Stranlund, John Spraggon	Resource Economics	Deterring Poaching from a Common-Pool Resource
16	Rachel Samara Danford	Paige Warren	Environmental Conservation	The Value of Small Green Spaces in Environmental Justice Neighborhoods
17	Rodrigo Dominguez Villegas	Jennifer Lundquist	Sociology	Tackling the Stigma of Failure: Policies, Practices, and Challenges for the Reintegration of Returned Migrants in Central America
18	Fadia Hasan	Henry Geddes Gonzales	Communication	The BGreen Project: Youth- Environment-Action
19	JooHee Han	Jennifer Lundquist; Sanjiv Gupta	Communication	The Military and Incarceration: hidden mechanisms of racial inequality in the U.S. labor market, 1980-2010
20	Eric Griffith	Lynnette Sievert	Anthropology	The future of dementia treatment: What already works and what can be improved? Perspectives from medical professionals
21	Karla Giuliano Sarr	Gretchen B. Rossman	Education	Integrating Cultures within Formal Schooling: Exploring Opportunities for Cultural Relevancy in Peri-Urban Senegal
22	Lucia Vergara	Sylvia Brandt	Resource Economics	Evaluation of caregivers' preferences for children's asthma treatments: the case of low income families in Chile
23	Tovar Cerulli	Donal Carbaugh	Communication	Wolves and Words: Stories Told, Values Held

| 24 | Katherine (Kat) Hanson | Daniel R. Anderson | Psychology | The influence of media on very young children |
| 25 | Isabelle Beaudry | Krista J. Gile | Mathematics/Statistics | Correcting Prevalence Estimation for Misclassification with Respondent-Driven Sampling Data |

Appendix II: Social Science Research Beyond the Academy Schedule

Time	Agenda	Remarks
11:00 AM	Registration	Check in and collect name tags. Students fill out forms giving ISSR permission to keep posters (ISSR would like to keep and display the posters, but students are welcome to take them).
11:15 AM	Welcoming	Laurel Smith-Doerr (Director, Institute for Social Science Research) George Milne (Doctoral Program Director, Isenberg School of Management) John McCarthy (Dean, Graduate School, Vice Provost of Graduate Education) Elizabeth Chilton (Associate Vice Chancellor for Research and Engagement) Steven Goodwin (Dean, College of Natural Sciences)
11:30 AM	First Panel Moderator: Laurel Smith-Doerr (ISSR)	Marina Vornovitsky (US Census Bureau) David DeRamus (Bates White Economic Consulting) Heather Lavigne (Education Development Center) Amy Loomis (IBM CHQ Communications)
1:00 PM	Lunch + Poster Viewing	Guests and judges are welcome to begin browsing posters. Presenters are recommended to stand near and introduce their posters.
2:00 PM	Second Panel Moderator: Bruce Desmarais (ISSR)	Padma Ramanujam (SAS) Stephanie Jo Kent (Bay State Hospital Systems) Bradley Klein (Golfweek) Angela Pazzaglia (Education Development Center)
3:25 PM	Information on the UMass Innovation Institute	James Capistran (Executive Director, UMass Innovation Institute)
3:30 PM	Coffee + Poster Judging	
4:30 PM	Award Ceremony	Final remarks by Bruce Desmarais (Associate Director, ISSR), John Wells (Associate Dean for Professional Programs, Isenberg), Jennifer Lundquist (Associate Dean for Research and Faculty Development, College of Social and Behavioral Sciences) Awards Presented by Dean John McCarthy
5:00 PM	Cocktails + Poster Viewing	
5:30 PM	Adjourn	Students begin wrapping up. Those who wish to take their posters home must take them down and carry them out. Students donating their posters to be displayed at ISSR can leave them.