

**CONTACT  
INFORMATION**

Annenberg School for Communication  
University of Pennsylvania  
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**RESEARCH  
INTERESTS**

Message Effects, Moral Psychology and Persuasion, Social Influence, Health/ Science Communication, Causal Inference and Web-based Experiments, Computational Communication Science, Computerized Textual Analysis, Recommendation Systems

**EDUCATION**

University of Pennsylvania:

**Ph.D., Communication**, Expected 2017

- Persuasive Effects of Moral Appeals: Message Production, Social Dynamics and Misconception Correction
- Adviser: Dr. Joseph N. Cappella

**M.A., Communication**, May 2014

University of Illinois at Urbana-Champaign:

**M.A., Communication**, August 2012

Renmin University of China:

**B.A., English Literature**, August 2010

**PUBLICATION****Journal Article**

Zhang, Jingwen, Brackbill, Devon, **Yang, Sijia**, & Centola, Damon. (2015). Efficacy and causal mechanism of an online social media intervention to increase physical activity: Results of a randomized controlled trial. *Preventive Medicine Reports*, 2(4), 651-657.  
doi:10.1016/j.pmedr.2015.08.005

Cappella, Joseph N., & **Yang, Sijia**. (2015). Constructing recommendation systems for effective health messages using content, collaborative, and hybrid Algorithms. *The ANNALS of the American Academy of Political and Social Science*, 659(1),290-360.  
doi:10.1177/0002716215570573

Kam, Jennifer A., & **Yang, Sijia**. (2013). Explicating how parent-child communication increases Latino and European American early adolescents' intentions to intervene in a friend's substance Use. *Prevention Science*, 15(4),536-546.

doi:10.1007/s11121-013-0404-8

### **Book Chapter**

**Yang, Sijia**, & González-Bailón, Sandra. (2016). Semantic networks and public opinion. In Jennifer Victor, Mark Lubell, and Alexander Montgomery (Eds.), *Oxford University Press Handbook of Political Networks*. Oxford: Oxford University Press.

Shumate, Michelle, Pilny, Andrew, Atouba, Yannick, Kim, Jinseok, Peña-y-Lillo, Macarena, Cooper, Katherine, Sahagun, Ariann, & **Yang, Sijia**. (2013). A Taxonomy of communication networks. In Elisia L. Cohen (Eds.), *Communication Yearbook 37*. New York: Taylor & Francis Group.

### **Other Publication**

Zhang, Jingwen, Brackbill, Devon, **Yang, Sijia** & Centola, Damon. (2015). Identifying the effects of social media on health behavior: Data from a large-scale online experiment. *Data in Brief*.

**Yang, Sijia**. (2013). A model based on normative theories: How Internet use and skills in the long run impact the watchdog role of the web and political cynicism of Chinese netizens [in Chinese]. *Journalism Evolution*, 1(2).

### **Working Paper**

**Yang, Sijia**, Maloney, Erin, Tan, Andy, & Cappella, Joseph N. "Using Moral Foundations Theory to explain smokers' support for vaping restriction: Verbal arguments versus visual vaping cues in electronic cigarette commercials".

**Yang, Sijia**, Kim, Hyun Suk, Oh, Poong, Kim, Minji, & Cappella, Joseph N. "Comparing four collaborative filtering algorithms to effectively recommend anti-smoking health messages".

**Yang, Sijia**, Zhang, Jingwen & Centola, Damon. "Using structural topic modeling to identify message markers for accepting intrauterine device among young women: An online randomized controlled trial".

**Yang, Sijia**, Xu, Jinghong, Luo, Mufan, & Qi, Jiayin. "Will Chinese government's online censorship boomerang? The effects of perceived censorship attempt initiated by different agents on rumor processing, spreading and evaluation of government among Chinese netizens."

**CONFERENCE  
PRESENTATION**

2016: **Yang, Sijia**, Kim, Hyun Suk, Oh, Poong, Kim, Minji, & Cappella, Joseph N. Comparing four collaborative filtering algorithms to effectively recommend anti- smoking health messages. *2nd Annual International Conference on Computational Social Science*. Evanston, Illinois.

2016: Kim, Hyun Suk, **Yang, Sijia**, Kim, Minji, & Cappella, Joseph N. Assessing the effectiveness of recommendation algorithms for health message design: An experiment. *2nd Annual International Conference on Computational Social Science*. Evanston, Illinois.

2016: **Yang, Sijia**, Maloney, Erin, & Cappella, Joseph N. Effects of visuals and arguments in electronic cigarette ads on smokers' perceptions of "secondhand vaping". *International Communication Association Annual Conference*. Fukuoka, Japan.

2016: Walter, Dror, & **Yang, Sijia**. It's the structure, stupid: Measuring media coverage impact on candidates' electoral success using semantic networks. *International Communication Association Annual Conference*. Fukuoka, Japan.

2015: **Yang, Sijia**, Oh, Poong, Kim, Minji, & Cappella, Joseph N. Tailoring by "cloning": A user-based collaborative filtering approach to recommend effective anti-smoking PSAs. *International Communication Association Annual Conference*. San Juan, Puerto Rico.

2015: Kim, Minji, Baek, Young Min, **Yang, Sijia**, & Cappella, Joseph N. Analyzing messages for their effectiveness: Content and executional features on smoking cessation advertisements. *International Communication Association Annual Conference*. San Juan, Puerto Rico.

2015: Jingwen, Zhang, Brackbill, Devon, **Yang, Sijia**, & Centola, Damon. The causal impact of social media on physical activity: A randomized controlled trial. *International Communication Association Annual Conference*. San Juan, Puerto Rico.

2014: **Yang, Sijia**, Xu, Jinghong, Luo, Mufan, & Qi, Jiayin. Will Chinese government's online censorship boomerang? The effects of perceived censorship attempt initiated by different agents on rumor processing, spreading and evaluation of government among Chinese netizens. *Annual Scientific Meeting of the International Society for Political Psychology*. Rome, Italy.

2013: **Yang, Sijia**. Processes of online political discussions and public opinion(s) formation/expression: A three-stage model based upon emergent social identities. *International Communication Association Annual Conference*. London, United Kingdoms.

2013: **Yang, Sijia**. Infotainment or hard news? The roles of post-viewing interpersonal discussion in cross-cutting learning between partisans. *International Communication Association Annual Conference (Graduate Student Preconference)*. London, United Kingdoms.

2012: **Yang, Sijia**. A model based on normative theories: How Internet use and skills in the long run impact the watchdog role of the web and political cynicism of Chinese netizens. *National Communication Association Annual Conference*. Orlando, FL.

2012: Kam, Jennifer A., & **Yang, Sijia**. Does targeted parent-child communication against substance use motivate Latino and European American adolescents to intervene in a friend's substance use? Testing a mediation model based on primary socialization theory. *Kentucky Conference on Health Communication*. Lexington, KY.

2012: **Yang, Sijia**, & Wang, Dongya. The roles of psychological reactance theory and political discussion in Chinese Internet users' reactions to online politically sensitive message(s). *International Communication Association Annual Conference (Graduate Student Preconference)*. Phoenix, AZ.

## GRANTS

**Russell Ackoff Doctoral Student Fellowship Award** 2016-2017

Awardee, \$4,000

The Wharton Risk Center, University of Pennsylvania

Project Title: *Can Tailored Value Appeals Correct Misconceptions about Scientific Controversies and Motivate Online Commenting to Promote Consensus Among Scientists?*

**Annenberg NHCS Seed Grant** 2013-2014

Co-Investigator, \$35,000 (direct)

PI: Prof. Damon Centola

Co-Investigators: Jingwen Zhang, Devon Brackbill

Annenberg School for Communication, University of Pennsylvania

Project Title: *How Online Networks Impact Health Outcomes: An Experimental Approach*.

**CSCC Student Research Grant** 2012-2013

PI, \$1,500

Center for the Study of Contemporary China, University of Pennsylvania

Project Title: *Will Chinese Government's Online Censorship Policy Boomerang? The Effects of Perceived Censorship Attempt on Rumor Processing, Spreading and Trust in Government among Chinese Netizens*.

AWARDS AND  
FELLOWSHIPS

**Annenberg School for Communication, University of Pennsylvania**

Research Fellowship. 2012-2016

Teaching Fellowship. 2015

**GAPSA, University of Pennsylvania**

Research Student Travel Award. 2013-2015

**International Communication Association**

Travel Award. *Political Communication Division* 2013

Travel Award. *Political Communication Division* 2012

RESEARCH  
EXPERIENCE

Research Fellow for Prof. Joseph N. Cappella

**Recommendation System for Tobacco Control PSAs:** 2013-2015

- Use the R language to program algorithms for recommendation system
- Empirically compare effectiveness of collaborative filtering recommender algorithms based on more than 9,000 evaluations for 200 tobacco control PSAs
- Co-investigator for an experimental approach to evaluate recommendation systems for tobacco control messages
- Analyze effects of message features of tobacco control PSAs using multilevel modeling

**Effects of Electronic Cigarette Ads on Policy Opinions:** 2014-2016

- Design, implement and analyze an experiment to compare effects of visuals and verbal arguments on policy opinions based on the Moral Foundations Theory

Research Assistant for Prof. Damon Centola

**Online Social Network Effects on Physical Activity:** 2013-2015

- Contribute to the design of an online experimental platform to examine social networking effects on physical activity
- Co-investigator for two field experiments involving more than 1,000 participants

**Online Discussion Groups and Contraceptive Use:** 2014-2016

- Contribute to the design of an online experimental platform to examine effects of peer discussion on contraceptive use
- Co-investigator for a 12-day online experiment examining effects of discussion group structure on young women's contraceptive use

- Use text mining techniques to identify message markers for attitude/opinion change by analyzing transcripts of online discussion

Research Assistant for Prof. Sandra González-Bailón

**Semantic Network Analysis and Public Opinion Research:** 2015

- Review literature on semantic network analysis and identify areas to apply to public opinion research

TEACHING  
EXPERIENCE

Annenberg School for Communication, University of Pennsylvania

**Introduction to Communication Behaviors:** Fall 2015

- Teaching assistant for Dr. Amy Jordan
- Responsible for leading weekly recitations
- Supervising student-led discussions
- Supervising and grading Capstone projects
- Writing and grading three exams

Department of Communication, University of Illinois at Urbana-Champaign

**Sexual Communication:** Fall 2011 - Spring 2012

- Responsible for grading weekly online discussion posts
- Supervising and grading capstone projects
- Holding regular office hours

TRAINING AND  
SKILLS

- Web-based experiments that involve social interactions and message exchanges
- Message recommendation systems: design, programming and evaluation
- Computerized content analysis techniques: supervised message classification, unsupervised topic modeling, and semantic network analysis
- Statistical modeling skills: multivariate analysis, structural equation modeling, and multilevel modeling
- Programming languages: R (proficiency), Python (beginner)

AFFILIATIONS

International Communication Association  
National Communication Association  
American Public Health Association  
International Society of Political Psychology

## REFERENCES

### **Joseph N. Cappella, Ph.D.**

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Annenberg School for Communication  
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### **Michael X. Delli Carpini, Ph.D.**

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