

Rui Pei

Contact Information

3620 Walnut Street
Philadelphia, PA 19104
Website: <https://ruipei1.github.io/website>
Github: <https://github.com/ruipei1>
Twitter: [@ruipei_penn](https://twitter.com/ruipei_penn)
OSF: <https://osf.io/xrhau/>

rui.pei@asc.upenn.edu
215-600-5242

Education

Annenberg School for Communication *Philadelphia, PA, 2017 – present*

University of Pennsylvania

Ph.D. in Communication, degree expected May 2021

Advisor: Emily Falk, Committee Members: Robert Hornik, Joseph Capella

Dissertation title: Cultural differences in the developmental trajectory of
susceptibility to social influence during adolescence

Research areas: developmental neuropsychology, computational methods,
communication neuroscience

Annenberg School for Communication

Philadelphia, PA, 2015 – 2017

University of Pennsylvania

M.A. in Communication, 2017

Brown University

Providence, RI, 2011 - 2015

B.Sc. in Cognitive Neuroscience

Publications

Pei, R., Lauharatanahirun, N., Cascio, C. N., O'Donnell, M. B., Shope, J. T.,
Simons-Morton, B. G., Vettel, J. M., & Falk, E. B. (2020). Neural processes during
adolescent risky decision making are associated with conformity to peer influence.
Developmental Cognitive Neuroscience, 44, 100794.

Pei, R., Schmaelzle, R., Kranzler, E., O'Donnell, M. B., & Falk, E. B. (2019).
Neural activity during anti-smoking message exposure predicts subsequent message
sharing engagement. *American Journal of Preventive Medicine*, 56 (2, Supplement
1), S40–S48.

Pei, R., Kranzler, E. C., Suleiman, A. B., & Falk, E. B. (2019). Promoting
adolescent health: insights from developmental and communication neuroscience.
Behavioural Public Policy. 3(1), 47 – 71

Baek, E. C., O'Donnell, M. B., Scholz, C., **Pei, R.**, Garcia, J. O., Vettel, J. M., Falk,
E. B. (in press) Activity in the Brain's Valuation and Mentalizing Networks is
Associated with Propagation of Online Recommendation.

Kranzler, E. C., Schmäzle, R., **Pei, R.**, Hornik, R. C., & Falk, E. B. (2019).
Message-Elicited Brain Response Moderates the Relationship Between
Opportunities for Exposure to Anti-Smoking Messages and Message Recall.
Journal of Communication, 69(6), 589-611.

	<p>Kranzler, E. C., Schmälzle, R., O'Donnell, M. B., Pei, R., & Falk, E. B. (2018). Adolescent neural responses to antismoking messages, perceived effectiveness, and sharing intention. <i>Media Psychology</i>, 0(0), 1–27.</p>	
Submitted/ Preprint/ Working papers	<p>Pei, R., Cosme, D., Andrews, M. E., Mattan, B. D., & Falk, E. B. (preprint). Cultural influence on COVID-19 cognitions and growth speed: the role of cultural collectivism. Preprint link: https://psyarxiv.com/fet6z</p> <p>Pei, R., Bayer, J., Cascio, C.N., O'Donnell, M.B., Falk, E.B. Meshi, D. (in prep). Connectedness and habitual use of social media predict the neural response to social exclusion in adolescents.</p> <p>Pei, R., Lauharatanahirun, N., O'Donnell, M.B., & Falk, E.B. (in prep). Neural risk sensitivity and the clustering structure of adolescents' social networks.</p> <p>Pei, R., Kranzler, E., Falker, E.B. (in prep). Cultural values moderate the developmental trajectory of peer influence effects during adolescence</p> <p>Pei, R., Lauharatanahirun, N., Falk, E.B. (in prep). Shared neural dynamics to health messages underlie similar message evaluation among adolescents.</p> <p>Andrews, M. E., Pei, R., Lauharatanahirun, N., Paul, A. M., & Falk, E. B. (forthcoming). Social media and the social brain. In R. Nabi (Ed.), <i>Our Online Emotional Selves: The Link Between Digital Media and Emotional Experiences</i>. Oxford University Press.</p> <p>Brennan, C., Aggarwal, A., Pei, R., Sussillo, D., Proekt, A. (under review at <i>Neuron</i>) Topological Models of Neural Population Dynamics are Predictive, Interpretable, and Generalizable.</p>	
Grants	<p>Wharton Russell Ackoff Doctoral Student Fellowship. 2019</p> <p>Wharton Risk Management Center</p> <p><i>Developmental trajectory of peer effects on adolescent decision making: a cultural perspective</i></p>	
Awards	<p>Top 5 Paper Award 2019</p> <p>International Communication Association</p> <p>Communication Science & Biology Interest Group</p> <p>Top 5 Paper Award 2018</p> <p>International Communication Association</p> <p>Communication Science & Biology Interest Group</p> <p>Top 5 Paper Award 2017</p> <p>International Communication Association</p> <p>Information Systems Division</p>	
Skills	<p>Technical skills</p> <p>Python (including nilearn/nibabel packages), R, Matlab (including SPM), Javascript</p> <p>Languages</p>	

English, Chinese (Mandarin), Spanish

Peer-
reviewed
Presentations

Presentations

Promising themes for anti-smoking campaigns targeting young adults in China: an investigation based on the Integrative Model. Pei, R., Lian, Y., Chen, J. X. (2020) The Medicine, Humanity and Media: Health China & Health Communication. Online conference/Beijing, China.

Habitual social media use is associated with increased neural activity in the mentalizing network during social exclusion. Pei, R., Meshi, D., Bayer, J., Cascio, C.N., O'Donnell, M.B., Falk, E.B. (2020) International Communication Association Annual Meeting. Online conference.

Neural activity during risky decision making reflects adolescents' online social network clustering structure. Pei, R., Lauharatanahirun, N., Cascio, C.N., O'Donnell, M.B., Falk, E.B. (2020) To be presented at the Society for Research on Adolescents Biennial meeting (conference rescheduled to 2021 due to COVID-19). Online conference.

Adolescent's neural and self-report responses to fear vs. humor appeals in tobacco-prevention messages. Pei, R., Lauharatanahirun, N., Falk, E.B. (2019) The Medicine, Humanity and Media: Health China & Health Communication. Beijing, China

Neural activity during risky decision making reflects online social network clustering structure. Pei, R., Lauharatanahirun, N., Cascio, C. N., O'Donnell, M.B., Vettel, J.M., Falk, E.B. (2019) Best papers in Communication Science and Biology, International Communication Association Annual Meeting. Washington, DC

Are Neural Mechanisms Associated with Social Feedback and Conformity Different among Teens and Young Adults? Cascio, C., Pei, R., Falk, E.B. (2019) International Communication Association Annual Conference. Washington, DC

Message-elicited brain response moderates the relationship between opportunities for exposure to anti-smoking messages and message recall. Kranzler, E. C., Schmälzle, R., Pei, R., Hornik, R.C., & Falk, E. B. (2019) International Communication Association Annual Conference. Washington DC, USA.

Safety versus risk endorsing peer attitudes influence adolescent risk taking through distinct neural mechanisms. Pei, R., Cascio, C., Simons-Morton, B., Falk, E. (2018) Best Papers in Communication Science and Biology, International Communication Association Annual Conference. Prague, Czech Republic.

Counterproductive effects of repeated exposure to health campaign messages: Evidence from a neuroimaging study. Liu, J., So, J., Pei, R., & Falk, E.B. (2018) International Communication Association Annual Conference. Prague, Czech Republic.

Adolescent neural responses to anti-smoking messages, perceived ad effectiveness, and sharing intention and elaboration. Kranzler, E., **Pei, R.**, Schmaelzle, R., O'Donnell, M.B., & Falk, E. B. Podium Presentation, (2018) Annual Meeting of Society for Research on Nicotine & Tobacco. Baltimore, MD.

Neural activity during anti-smoking message exposure predicts subsequent message elaboration. **Pei, R.**, Schmaelzle, R., Kranzler, E., O'Donnell, M. B., & Falk, E. B. (2017) Best Papers in Information Systems Division, International Communication Association Annual Conference. San Diego, CA.

Posters

Neural activity during risky decision making reflects online social network clustering structure. **Pei, R.**, Lauharatanahirun, N., Cascio, C.N., O'Donnell, M.B., Vettel, J.M., Falk, E.B. (2019) Social and Affective Neuroscience Society Annual Conference. Miami, Florida

Neural activity during anti-smoking message exposure predicts subsequent message elaboration. **Pei, R.**, Schmaelzle, R., Kranzler, E., O'Donnell, M. B., & Falk, E. B. (2017) Social and Affective Neuroscience Society Annual Conference. Los Angeles, CA

Role of reinforcement learning in tic expression: Integrating methods from behavioral psychology and computational neuroscience. Conelea, C., Frank, M., Frank, H., Wiecki, T., **Pei, R.**, & Freeman, J. (2014) Annual conference of the Association for Behavioral and Cognitive Therapies. Philadelphia, PA

Industry-related research experience

Microsoft Research Asia

Research fellow for Dr. Xie Xing *Beijing, China, January 2018 – July 2018*

- Combined online survey and linguistic analyses to examine factors contributing to successful search engine advertisements.
- Examined the associations between personality traits and individuals' information seeking behavior.

Pediatric Anxiety Research Clinic of Rhode Island Hospital

Research assistant *Providence, RI, May 2013 – May 2015*

- Investigated cognitive and emotional processes in exposure-based behavioral treatments for pediatric anxiety disorder and OCD.
- Designed an hour-long MATLAB and Psychtoolbox based behavioral task for a research project on Tourette's syndrome.
- Assisted fMRI and TMS neuropsychology experiments on tic suppression.

The Neuromarketing Labs

Summer intern *Stuttgart, Germany, July – September 2014*

- Designed neuropsychological experiments to test efficacy and optimization strategies for a novel wearable product.
- Assisted EEG based neuromarketing studies to determine appropriate pricing of a commercial products.

Teaching

Graduate Teaching Assistant

University of Pennsylvania *Philadelphia, PA, September 2017–December 2017*

Fall 2017 COMM310 The Communication Research Experience

- Facilitated the development and preparation of course materials.
- Directly supervise two undergraduate students during semester-long research projects.

Undergraduate Teaching Assistant

Brown University

Providence, RI, January 2013–May, 2015

Spring 2013 CLPS0010 Elementary Psychology

Fall 2013 NEUR1030 Neural Systems

Fall 2014 CLPS0010 Elementary Psychology

CLPS0010:

- Responsible for weekly classes of 15 students to facilitate main lectures, collaborate with professors and other TAs with course material design.
- Led discussions, answer questions, and help review course materials in office hours.
- Graded weekly writing assignments and exam papers.

NEUR1030

- Independently taught weekly recitations (about 50 students in size) to solidify course materials.
- This course included three closed-book exams. Before each exam, I and other three TAs led 2-hour long Q&A sessions (about 200 students in size) to answer questions that the students had prepared.

Affiliations

Social Affective Neuroscience Society
International Communication Association
Society for Research on Adolescence