

# Rui Pei

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Academic Training **Postdoctoral fellow** *Palo Alto, October, 2021 - now*  
Department of Psychology, Stanford University  
Principle investigator: Jamil Zaki

Education **Annenberg School for Communication** *Philadelphia, PA, 2017 – 2021*  
University of Pennsylvania  
Ph.D. in Communication,  
Advisor: Emily Falk, Committee Members: Robert Hornik, Joseph Capella

**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.**, Courtney, A., Ferguson, I., Brennan, C., Zaki, J. (in press). A neural signature of social support mitigates affective responses to negative memories. *Scientific Reports* [[Data & Code](#)]

**Pei, R.**, Cosme, D., Andrews, M. E., Mattan, B. D., Carreras-Tartak, J., & Falk, E. B. (2023). Cultural influence on COVID-19 cognitions and growth speed: The role of collectivism. *Social and Personality Psychology Compass*, e12908. [[Data](#)] [[Preregistration](#)]

**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

Minich, M., Falk, E.B., Cooper, N., Cosme, D., Chan, H.E., **Pei, R.**, O'Donnell, M.B., Cascio, C.N. (2023) Neural correlates associated with conformity across

adolescence and early adulthood. *Developmental Cognitive Neuroscience*, 60, 101215.

Brennan, C., Aggarwal, A., **Pei, R.**, Sussillo, D., & Proekt, A. (2023). One dimensional approximations of neuronal dynamics reveal computational strategy. *PLOS Computational Biology*, 19(1), e1010784.

Baek, E. C., O'Donnell, M. B., Scholz, C., **Pei, R.**, Garcia, J. O., Vettel, J. M., Falk, E. B. (2021) Activity in the Brain's Valuation and Mentalizing Networks is Associated with Propagation of Online Recommendation. *Scientific Reports*. 11(1), 11196

Kang, Y., Cosme, D., **Pei, R.**, Pandey, P., Carreras-Tartak, J., & Falk, E. B. (2021). Purpose in life, loneliness, and protective health behaviors during the COVID-19 pandemic. *The Gerontologist*, 081

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.

Kranzler, E. C., Schmäzle, R., O'Donnell, M. B., **Pei, R.**, & Falk, E. B. (2018). Adolescent neural responses to antismoking messages, perceived effectiveness, and sharing intention. *Media Psychology*, 0(0), 1–27.

Andrews, M. E., **Pei, R.**, Lauharatanahirun, N., Paul, A. M., & Falk, E. B. (2023). Social media and the social brain. In R. Nabi (Ed.), *Our Online Emotional Selves: The Link Between Digital Media and Emotional Experiences*. Oxford University Press.

Submitted/  
Preprint/  
Working  
papers

**Pei, R.**, Kranzler, E., Falker, E.B. (under revision). Cultural values moderate the developmental trajectory of peer influence effects during adolescence

**Pei, R.** & Zaki, J. (2023). Quantifying the value of social risk taking. *PsyArXiv*. [\[Preprint\]](#)

**Pei, R.**, Courtney, A., Ferguson, I., Zaki, J. (in prep). A human subcortical network underlying social risk avoidance

**Pei, R.**, Zaki, J. (in prep). The Dynamics of Social Risk Taking: Linking Daily Affect to Long-term Wellbeing in College Students

Cosme, D., Kang, Y., Tartak, J. C., Ahn, J., Corbani, F. E., Cooper, N., ... **Pei, R.**, ... & Falk, E. (in prep). Study protocol: Social Health Impact of Network Effects (SHINE) Study. [\[Preprint\]](#)

Fellowships  
& Awards

**Wharton Russell Ackoff Doctoral Student Fellowship.** 2019  
Wharton Risk Management Center  
*Developmental trajectory of peer effects on adolescent decision making: a cultural perspective*

**Top 5 Paper Award** 2018, 2019  
International Communication Association  
Communication Science & Biology Interest Group  
**Top 5 Paper Award** 2017  
International Communication Association  
Information Systems Division

Peer-  
reviewed  
Presentations

### **Talks/Presentations**

**Not Motivated or Too Scared? The Dissociable Roles of Trait Anxiety and Depression in Social Risk Taking.** Pei, R., Zaki, J. (May, 2023) International Communication Association Annual Meeting. Toronto, Canada

**Ecological Momentary Assessment of Empathy Contagion in a College Student Social Network.** Pei, R., Zaki, J. (May, 2023) International Communication Association Annual Meeting. Toronto, Canada

**Reward-related neural response during risky decision making reflects adolescents' social network clustering structure.** Pei, R., Lauharatanahirun, N., Cascio, C.N., O'Donnell, M.B., Falk, E.B. (April, 2023) Society for Research on Adolescents Biennial meeting. Santa Barbara, California

**Reward-related neural response during risky decision making reflects adolescents' social network clustering structure.** Pei, R., Lauharatanahirun, N., Falk, E.B. (March, 2023) Society for Research on Adolescents Biennial meeting. Salt Lake City, Utah

**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. (2021) Society for Research on Adolescents Biennial meeting. 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., Schmäzle, 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**

**A neural signature of social support mitigates affective responses to negative memories.** Pei, R., Courtney, A., Ferguson, I., Brennan, C., Zaki, J. (2023) Social and Affective Neuroscience Society Annual Conference. Santa Barbara, California

**Too scared to reach out? The neural basis of social risk taking.** Pei, R., Grayson, S., Ogunbamowo, D., Courtney, A., Zaki, J. (2023) The Society for Personality and Social Psychology. Atlanta, Georgia

**Empathy perception gap poses barrier for social connection and wellbeing.** Grayson, S., Pei, R., Soh, S. J., Appel, R., Ogunbamowo, D., Courtney, A., Zaki, J., Harrari, G. (2023) The Society for Personality and Social Psychology. Atlanta, Georgia

**Age moderated relation between perceived stress and social media use.** Xu, Z., Pei, R. (2023) The Society for Personality and Social Psychology. Atlanta, Georgia

**Does simulated social support reduce negative emotion during autobiographical remembering?** Courtney, A., Ferguson, I., Pei, R., Zaki, J. (2022) Social and Affective Neuroscience Society Annual Conference. Virtual

**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.

Teaching

**Guest lectures**

- "Social risk taking in adolescents", 2022/4, Dominican College of California

**Teaching Assistant**

*University of Pennsylvania*

*Fall 2017*

Fall 2017 The Communication Research Experience (COMM310)

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

*Brown University*

*2013-2015*

Spring 2013 Elementary Psychology (CLPS0010)

Fall 2013 Neural Systems (NEUR1030)

Fall 2014 Elementary Psychology (CLPS0010)

Elementary Psychology

- 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.

Neural Systems

- 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.

Ad-hoc reviews

*PNAS, Child Development, Social and Cognitive Affective Science, Social and Personality Psychology Compass, Media Psychology*

Affiliations

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

Referees

**Jamil Zaki, Ph.D.**

Associate Professor of Psychology  
Department of Psychology, Stanford University  
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**Emily B. Falk, Ph.D.**

Professor of Communication, Psychology, and Marketing  
Annenberg School for Communication, University of Pennsylvania  
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**Gabriella M. Harari, Ph.D.**

Assistant Professor of Communication  
Department of Communication, Stanford University  
[gharari@stanford.edu](mailto:gharari@stanford.edu)

**Nina Lauharatanahirun, Ph.D.**

Assistant Professor of Biobehavioral Health and Biomedical Engineering  
Biobehavioral Health – BBH, Pennsylvania State University  
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