Jeesung Ahn

Psychologist | Neuroscientist | Researcher

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EDUCATION

Ph.D. Candidate in Psychology, University of Pennsylvania — *Aug. 2019 - Present*

Communication Neuroscience Lab (Advisor: Emily Falk, Ph.D.), Department of Psychology — *Philadelphia, PA*

M.A. in Psychology, University of Pennsylvania — *Aug. 2019 - Aug. 2021*

Communication Neuroscience Lab (Advisor: Emily Falk, Ph.D.), Department of Psychology — *Philadelphia, PA*

- Thesis: Effects of message framing on neural responses to persuasive message and health behavior change

M.S. in Cognitive Science and Engineering, Yonsei University — *Mar. 2016 - Feb. 2018*

Applied Brain Cognition Lab (Advisor: Sanghoon Han, Ph.D.), Interdepartmental Cognitive Science Program — *Seoul, South Korea*

- Thesis: Voxel-wise mapping of functional magnetic resonance imaging in impression formation (best thesis award)

B.A. in Psychology & B.S. in Brain and Cognitive Sciences, Korea University — *Mar. 2011 - Aug. 2015*

Department of Psychology, College of Information and Communications — *Seoul, South Korea*

Exchange Student Program, Macquarie University — *July, 2013 - Dec. 2013*

Department of Psychology — *Sydney, Australia*

ACADEMIC POSITIONS

Teaching Assistant — *Jan. 2021 – Dec. 2021*

Department of Psychology, University of Pennsylvania — *Phildelphia,PA*

- Introduction to Experimental Psychology (Spring 2021, Rebecca Waller, Ph.D.; Fall 2021, Anna Jenkins, Ph.D.)
- Worked one-on-one with 50+ students to provide mentorship for their study plans
- Created student evaluation tools; graded and provided qualitative feedback on student essays

Research Associate — *April. 2015 – Mar. 2019*

Applied Brain Cognition Lab, Yonsei University (P.I.: Sanghoon Han, Ph.D.) & Integrated Neurocognitive Functional Imaging Center, Yonsei University Severance Hospital (P.I.: Seung-Koo Lee, M.D., Ph.D.) — *Seoul, South Korea*

- Designed and directed 7+ end-to-end behavioral and neuroimaging projects, resulting in 3 first-author publications, an award- winning Master's thesis, and 6 international conference presentations
- Provided extensive technical support and mentorship to cross-functional collaborators on research project management, neuroimaging analyses, data quality control, and MATLAB scripting

Research Consultant — *Mar. 2016 – Feb. 2018*

Team Quantumlabs — *Seoul, South Korea*

- Conducted A/B tests (psychological/behavioral experiments, neuroimaging experiments, in-depth interviews) to evaluate the usability and efficacy of a novel neurostimulation device
- Presented findings to cross-functional stakeholders (venture capital funders, designers, engineers), leading to an award at Yonsei Start-up Competition and the successful acquisition of $100K in funding

Research Coordinator — *Jun 2017 – Feb 2018*

Brain Korea 21+, National Research Foundation of Korea — *Seoul, South Korea*

- Managed research funding for Yonsei Applied Brain Cognition Lab

Research Coordinator — *Mar 2016 – Aug 2016*

Institute of Human Behavior, Yonsei University — *Seoul, South Korea*

- Managed research funding for all Psychology laboratories in Yonsei University
- Coordinated Psychology departmental events

Research Assistant — *Nov 2014 – April 2015*

Laboratory of Social Decision Neuroscience, Korea University (Advisor: Hackjin Kim, Ph.D.) — *Seoul, South Korea*

- Collected behavioral and neuroimaging data (e.g., managing participants) for an EEG hyperscanning experiment

PUBLICATIONS

Ahn, J., Nah, Y., Ko, I., & Han, S. (n.d.). Voxel-wise Mapping of Functional Magnetic Resonance Imaging in Impression Formation. *Korean Society for Emotion and Sensibility*.

Zhou, D., Kang, Y., Cosme, D., Jovanova, M., He, X., Mahadevan, A., **Ahn, J.**, Stanoi, O., Brynildsen, J. K., Cooper, N., Cornblath, E. J., Parkes, L., Mucha, P. J., Ochsner, K. N., Lydon-Staley, D. M., Falk, E. B., & Bassett, D. S. (2023). Mindful attention promotes control of brain network dynamics for self-regulation and discontinues the past from the present. *PNAS*, *120*(2). https://doi.org/10.1073/pnas.2201074119

Kang, Y., Cosme, D., Lydon-Staley, D., **Ahn, J.**, Jovanova, M., Corbani, F., Lomax, S., Stanoi, O., Strecher, V., Mucha, P. J., Ochsner, K., Bassett, D. S., & Falk, E. B. (2022). Purpose in life, neural alcohol cue reactivity and daily alcohol use in social drinkers. *Addiction*, *117*(12), 3049–3057. https://doi.org/10.1111/add.16012

Cosme, D., Kang, Y., Tartak, J. C., **Ahn, J.**, Corbani, F. E., Cooper, N., Doré, B., He, X., Helion, C., Jovanova, M., Lomax, S., Mahadevan, A., McGowan, A. L., Paul, A., Pei, R., Resnick, A., Stanoi, O., Zhang, T., Zhang, Y., … Falk, E. B. (2022). *Study protocol: Social Health Impact of Network Effects (SHINE) Study* [Preprint]. PsyArXiv. https://doi.org/10.31234/osf.io/cj2nx

Kang, Y., Cosme, D., **Ahn, J.**, Strecher, V., Lydon-Staley, D., Corbani, F., Jovanova, M., Stanoi, O., Lomax, S., Ochsner, K., Mucha, P., Bassett, D. S., & Falk, E. B. (2022, May). Alcohol cue reactivity in the ventral striatum and daily purpose in life moderate the relationship between alcohol craving and consumption in college students. *Annual International Communication Association Conference, Paris, France*.

Ahn, J., Lee, J., Han, J. H., Kang, M. S., & Han, S. (2018). Group analysis data representing the effects of frontopolar transcranial direct current stimulation on the default mode network. *Data in Brief*, *20*, 1309–1313. https://doi.org/10.1016/j.dib.2018.08.164

Ahn, J., Kim, H., Park, J., & Han, S. (2018). Interactivity of Neural Representations for Perceiving Shared Social Memory. *Korean Society for Emotion and Sensibility*, *21*(3), 29–48. https://doi.org/10.14695/KJSOS.2018.21.3.29

WORKING PAPERS

Ahn, J., Cooper, N., Kang, Y., O'Donnell, M., Green, M., Samanez-Larkin, G., & Falk, E. B. (2022). Brain responses to gain- and loss-framed messages differ, and interact with baseline physical activity, to predict later behaviors. *In Prep*.

Ahn, J., Cosme, D., Kang, Y., Zachary, B., Ochsner, K., Mucha, P., Lydon-Staley, D., Bassett, D. S., & Falk, E. B. (2022). Segregation and integration of brain functional connectivity networks moderate craving-drinking relationships in daily life. *In Prep*.

Ahn, J., Falk, E. B., & Kang, Y. (2022). Relationships between physical activity and loneliness: A systematic review of intervention studies. *In Prep*.

Ahn, J., Kang, Y., Mwilambwe-Tshilobo, L., Cosme, D., Bassett, D. S., Zachary, B., Lydon-Staley, D., Mucha, P., Ochsner, K., & Falk, E. B. (2022). Neural responses to peer faces predict loneliness in college students. *In Prep*.

Ahn, J., Mwilambwe-Tshilobo, L., Kang, Y., Cosme, D., Bassett, D. S., Zachary, B., Lydon-Staley, D., Mucha, P., Ochsner, K., & Falk, E. B. (2022). Connectome-based predictive modeling of loneliness during COVID-19. *In Prep*.

Ahn, J., Mwilambwe-Tshilobo, L., Kang, Y., Cosme, D., Bassett, D. S., Zachary, B., Lydon-Staley, D., Mucha, P., Ochsner, K., & Falk, E. B. (2022). Inaccurate self-evaluation is associated with mental well-being and mentalizing activity in the brain. *In Prep*.

Ahn, J., Zhou, D., Falk, E. B., Bassett, D. S., & Ruscio, A. (2022). Brain network underpinnings of perseverance thought in clinical populations. *In Prep (Ahn & Zhou Co-First Authorship)*.

PRESENTATIONS

Invited Talks

Ahn, J., Cooper, N., Kang, Y., O'Donnell, M., Green, M., Samanez-Larkin, G., & Falk, E. B. (2022, May). Brain responses to gain- and loss-framed messages differ, and interact with baseline physical activity, to predict later behaviors. *Annual International Communication Association Conference, Paris, France*.

Ahn, J., Richards, K., & Ortiz, T. (2021, April). Recommendations for an intelligent diet. *Wharton Data Science Live 2021, Virtual*.

Conference Poster Presentations

Ahn, J., Cooper, N., Kang, Y., O'Donnell, M., Green, M., Samanez-Larkin, G., & Falk, E. B. (2022, May). Brain responses to gain- and loss-framed messages differ, and interact with baseline physical activity, to predict later behaviors. *Annual International Communication Association Conference, Paris, France*.

Chan, H.-Y., Scholz, C., Cosme, D., Martin, R., Benitez, C., Cooper, N., Paul, A., **Ahn, J.**, Doré, B., Resnick, A., Carreras-Tartak, J., & Falk, E. B. (2022, May). Brain-based prediction of information virality: Evidence of cross-cultural validity from a pre-registered neuroimaging study. *Annual International Communication Association Conference, Paris, France*.

Cosme, D., Scholz, C., Chan, H.-Y., Martin, R., Cooper, N., Paul, A., **Ahn, J.**, Doré, B., Resnick, A., Carreras-Tartak, J., & Falk, E. B. (2022, May). Does focusing on self or social relevance during news article exposure increase motivation to share content? *Annual International Communication Association Conference, Paris, France*.

Kang, Y., Cosme, D., **Ahn, J.**, Strecher, V., Lydon-Staley, D., Corbani, F., Jovanova, M., Stanoi, O., Lomax, S., Ochsner, K., Mucha, P., Bassett, D. S., & Falk, E. B. (2022, May). Alcohol cue reactivity in the ventral striatum and daily purpose in life moderate the relationship between alcohol craving and consumption in college students. *Annual International Communication Association Conference, Paris, France*.

Ahn, J., Jun, S., Lee, J., Min, S., Lee, S.-K., Park, S. H., & Han, S. (2018, November). Altered emotional attention and brain functional connectivity networks of emotional laborers. *Society for Neuroscience 2018 Annual Conference, San Diego, USA*.

Min, S., Jun, S., **Ahn, J.**, Lee, J., Lee, S.-K., Park, S. H., & Han, S. (2018, November). Intrinsic functional connectivity in emotion regulation network is altered in emotion laborers. *Society for Neuroscience 2018 Annual Conference, San Diego, USA*.

Lee, J., Lee, H. J., **Ahn, J.**, Lee, S.-K., & Han, S. (2018, June). Exploring the high-resolution EPI fMRI protocol to reduce susceptibility-related BOLD signal dropout. *The Organization for Human Brain Mapping 2018 Annual Meeting, Singapore*.

Ahn, J., Han, J. H., Kang, M. S., & Han, S. (2017, November). Frontopolar transcranial direct current stimulation changes intrinsic functional connectivity networks during resting-state fMRI. *Society for Neuroscience 2017 Annual Conference, Washington DC, USA*.

Ahn, J., Nah, Y., & Han, S. (2016, November). Voxel-wise Mapping of the Cingulate Cortex in Impression Formation. *Society for Neuroscience 2016 Annual Conference, San Diego, USA*.

Ahn, J., Nah, Y., & Han, S. (2016, April). Patterns of Functional Connectivity during Preparation Periods Can Predict the Tendency to Give Up in Following Decision-Making. *Cognitive Neuroscience Society 2016 Annual Conference, New York, USA*.

SCHOLARSHIPS

Penn Full-Ride Doctoral Fellowship ($400K) *2019 - Present*

School of Arts and Sciences, University of Pennsylvania

Kwanjeong Full-Tuition Scholarship for Master's Program ($22K) *2016 - 2017*

Kwanjeong Educational Foundation (http://en.ikef.or.kr)

Brain Korea 21+ Graduate Scholarship *2016 - 2017*

National Research Foundation of Korea

HONORS & AWARDS

Graduate Travel Award *2022*

University of Pennsylvania, International Communication Association Conference 2022

Top Poster Award *2022*

Social Affective Neuroscience Society 2022

- Presented findings at an invited talk, titled "Brain responses to gain- and loss-framed messages differ, and interact with baseline physical activity, to predict later behaviors"

Best Master's Thesis Award *2018*

Yonsei University Graduate Group

- For the thesis titled "Voxel-wise mapping of functional magnetic resonance imaging in impression formation"

Interdisciplinary Research Initiative Award, Grand Prize *2017*

Institute of Convergence Science (ICONS), Yonsei University

- Collaborated with electrical engineers to enhance brain image resolution using deep learning; awarded $5K research funding;

Yonsei Start-up Challenge Award *2016*

Yonsei Enterprise Support Foundation

- Presented A/B test findings for a novel neurostimulation device developed by a start-up company, Team Quantumlabs; Led to $100K in funding

Dean's Honors *2011, 2013, 2014*

Department of Psychology, Korea University

- For 5 semesters; 2014, Fall Semester (GPA 4.25/4.5); 2014, Spring Semester (GPA 4.25/4.5); 2013, Spring Semester (GPA 4.0/4.5); 2011, Fall Semester (GPA 4.11/4.5); 2011, Spring Semester (GPA 4.37/4.5)

VOLUNTEER ACTIVITIES & OUTREACH

Consultant *Sept. 2022 – Present*

Penn Biotech Group Healthcare Consulting *Phildelphia,PA*

- Presented weekly deliverables to a biotherapeutic start-up company by analyzing the market landscape for a novel cancer therapy that will have a high impact on 1M+ tumor patients
- Led in-depth interviews with healthcare stakeholders and qualitatively evaluated 200+ clinical trials and company profiles, providing data-driven recommendations and benchmarks for partnership opportunities, market sizing and product pricing
- Conducted fast-paced research and extensive literature reviews to meet the client's needs and timeline

Data Analyst *Mar. 2022 – Present*

Penn Mind Sciences Diversity and Equity Initiative *Phildelphia,PA*

- Designed and collected online surveys (Qualtrics) to assess participants' experience with an outreach program that mentors underrepresented minority students in their career paths in science
- Wrangled and analyzed pre- vs. post- event data, including qualitatively reviewing participants' written feedback
- Visualized outcomes using ggplot2, wordcloud, R Markdown and presented actionable insights and recommendations to organizers to improve the program

Data Scientist *Feb. 2022 – May 2022*

Penn Data Science Group *Phildelphia,PA*

- Collaborated cross-functionally to wrangle and analyze climate data in the greater Philadelphia area
- Created interactive maps that visualize air quality and relevant health outcomes, which were used by the client (climate activists and researchers) to efficiently communicate their cause to climate policymakers