Hyeran Kang

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Education

MAR 2021 - AUG 2023

Korea University
M.S. in Behavioral Cognitive Neuroscience, Department of Psychology (GPA: 4.50/4.50)
Advisor: *Hackjin Kim*

MAR 2016 - FEB 2021

Ewha Womans University
Summa Cum Laude (GPA: 4.13/4.30)
B.A. in Social Studies Education (History), Department of Education
B.A. in Psychology, Department of Social Science

Publications

Kang, H., Kim, J.Y., Kim, D., and Kim, H. Daemullim: Empirical Evidence for Negative Pay-It-Forward Reciprocity in Hierarchical Situations, *Under Review*

Kang, H., Kim, K.I., Kim, J.H., and Kim, H. Neural representations in MPFC and insula encode individual differences in estimating others' preferences, *In Preparation*

Presentations

Kang, H., Kim, K.I., Kim, J.H., and Kim, H. (2023). Neural representations in MPFC and insula encode individual differences in estimating others' preferences*, Poster presented at the 2023 Annual Meeting of Social and Affective Neuroscience Society (SANS)*
Apr. 2023, California, U.S.

Kang, H., Kim, K.I., Kim, J.H., and Kim, H. (2023). Neural Mechanisms underlying individual differences in others' preference estimation*, Talk presented at the 2023 Annual Meeting of the Korean Society for Cognitive and Biological Psychology*
Feb. 2023, Seoul, Korea

Kang, H., Kim, J.Y., Kim, D., and Kim, H. (2022). Negative Pay-It-Forward in Hierarchical Situations*, Talk presented at the 2022 Annual Meeting of the Korean Society for Cognitive and Biological Psychology*
Feb. 2022, Virtual Meeting, Korea

Experiences

MAR 2021 –

Graduate Student

Laboratory of Social Decision Neuroscience, Korea University

***Project 1**: Daemullim: Negative Pay-It-Forward Reciprocity in Hierarchical Situations (Under Review)*

I undertook a research project that involved designing the experimental protocol, collecting data, analyzing it, and writing the manuscript. As a result of this project, I gained an in-depth understanding of the entire research process, starting from designing the experiment to writing and submitting the manuscript. Due to the pandemic, the experiment was conducted online using jsPsych. Data analysis was performed using SPSS and MATLAB, while visualization was carried out using MATLAB, Python, and R. This experience has taught me the importance of starting the experiment with a clear basis of previous studies and theories, developing precise hypotheses, organizing data systematically, and putting in significant effort in writing the manuscript.

***Project 2**: Neural representations in MPFC and insula encode individual differences in estimating others' preferences (In Preparation)*

I performed an fMRI data analysis that involved several methods such as univariate group level analysis (multiple regression), group independent component analysis, and inter-subject representational similarity analysis. At present, I am writing the manuscript for submission. This was my first experience working on an fMRI project, and it provided me with new insights into various analysis techniques. As a result of this research, I gained a greater appreciation for the intricate journey of neural mechanisms underlying individual differences in social cognition. Furthermore, my interest in the topic expanded to include genetic factors and resting-state connectivity. Although I was unable to explore these areas in this project, I hope to have the opportunity to do so in the future.

FEB 2020 – AUG 2020

Undergraduate Research Assistant

A Growing Experience Laboratory, Ewha Womans University

***Project**: Children's Language Development, Executive Functions, Parenting Style, GRIT, Resilience*

I conducted experiments on children between the ages of 4 and 6, wrote detailed records of the experiments, and coded materials for analysis. Through this work, I gained experience in experimental design, data collection, and developed skills in organizing and managing large amounts of data. Working with young children also helped me to develop patience and adaptability, as I learned to adjust my approach to accommodate the needs and behavior of each child. Overall, this experience taught me the importance of thoroughness and attention to detail in research, and the need for flexibility and creativity when working with young participants.
Advisor: *Sujin Yang*

Awards & Scholarships

MAR 2022

Korea University Psychology – Teaching Assistant Scholarship (Graduate)

FEB 2022

Korea University Psychology BrainKorea21 Idea Contest - 2nd place (Graduate)

Team: Symbeolli (meaning "Understanding Discrimination Through Psychology" in Korean Initial)

My team created video clips addressing a range of social issues, including ageism, racial discrimination, political conflicts, school violence, and altruism. The purpose of these videos was to demonstrate the psychological and neural mechanisms underlying these phenomena, using related psychology and neuroscience studies. The videos were uploaded on YouTube and targeted towards teenagers, so we made sure to make the materials as engaging and comprehensible as possible, using movie clips, news topics, books, and other sources of interest to young people. Through this project, I learned the importance of communicating complex ideas in an accessible way and making the material relevant and interesting to the intended audience.
https://www.youtube.com/@user-xb9zt5uj5w/videos

MAR 2017 – FEB 2021

2020 Academic Excellence Scholarship (Undergraduate); Best GPA Dean's List

Merit-based scholarship awarded to students with top GPA in 2019

2019 Academic Excellence Scholarship (Undergraduate); Best GPA Dean's List

Merit-based scholarship awarded to students with top GPA in 2018

2018 Academic Excellence Scholarship (Undergraduate); Best GPA Dean's List

Merit-based scholarship awarded to students with top GPA in 2017

2017 Academic Excellence Scholarship (Undergraduate); Best GPA Dean's List

Merit-based scholarship awarded to students with top GPA in 2016

Dec 2017

Abroad Teaching Practice Scholarship (Undergraduate)
Scholarship provided by the Department of Education at Ewha Womans University

Extracurricular Activities

MAR 2019 – APR 2019

Teaching Practice
Sookmyung Girl's Middle School (Seoul, Korea)
: Served as a temporary prime teacher and history teacher for 7th-grade classrooms, teaching Korean ancient history in a public middle school. During this time, I learned the value of teaching as I prepared teaching materials, supplementary activities, pop quizzes, and interacted with my students. Through this experience, I gained a deeper appreciation for the preparation and planning that goes into teaching, as well as the importance of engaging with students in meaningful ways.

DEC 2017 – MAR 2018

Education Volunteer Service
Yangjae Elementary School (Seoul, Korea)
: Volunteered for winter break school and after-school programs, where I provided care and instruction for students between the ages of 5 and 10 whose parents were both working and unable to look after them during winter break or after school hours. During these programs, I taught fundamental skills such as math, reading, and essay writing. Through this experience, I gained a deeper appreciation for the importance of providing a safe and supportive environment for children, and the value of teaching them essential life skills that will serve them well in the future.

JAN 2018 – FEB 2018

Abroad Teaching Practice
Joshua-Quincy Elementary School (Boston, Massachusetts)
: Chosen as a teammate in the Abroad Teaching Practice program in Boston, which was sponsored by the Department of Education at Ewha Womans University. As part of this program, I worked with a team at Joshua-Quincy Elementary School to introduce students to the history of Hangul, the Korean alphabet, and teach them how to read and write Korean. We helped each student understand the basic principles of Korean and even taught them how to write their own names using a brush. Additionally, with the teachers, we discussed educational programs and facilities for students with disabilities, which was inspiring and eye-opening for me. This experience helped me see the importance of inclusive education and made me more aware of the needs of all students.

Skills

Programming Language

Language: Matlab, Python, HTML
Experimental Tools: jsPsych, PsychoPy, Cogent & PsychToolBox, Cognition.run
Statisticical Tools:(Mostly) Matlab & SPSS
(Visualization) Python & R & Prism GraphPad
(fMRI) SPM12, CONN, FSL
(ETC) SAS

Statistical Skills

Behavioral Data Analysis:
Linear Regression, Logistic Regression, Generalized Linear Mixed Model, Repeated-Measure ANOVA, K-Means Clustering

Functional NeuroImaging Analysis:
Group Independent Component Analysis (gICA), Temporal Sorting, Multiple Regression, Psychophysiological Interaction (PPI), inter-subject Representational Similarity Analysis

Structural NeuroImaging Analysis:

Diffusion Tensor Imaging

Certificate

Teacher License (Social Studies Education)
Minister of Education, Korea

Reference

Advisor

Hackjin Kim
Department of Psychology, Korea University
Contact: hackjinkim@korea.ac.kr
http://socialdecisionneurosciencelab.org/