Juha Lee

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RESEARCH INTERESTS

- Investigating how belief formation, learning, and decision-making are altered in psychiatric conditions

EDUCATION

M.A. in Clinical Psychology Mar 2026 – Present
Seoul National University Seoul, South Korea
Advisor: Prof. Woo-Young Ahn

B.A. in Psychology Mar 2021 – Aug 2025
Seoul National University Seoul, South Korea
Major in Psychology and Brain-Mind-Behavior
GPA: 3.90 / 4.30

RESEARCH EXPERIENCE

Computational Clinical Science Laboratory Seoul National University
Undergraduate Research Assistant Sep 2024 – Feb 2026
Advisor: Prof. Woo-Young Ahn

- Analyzed behavioral data from a naturalistic multi-armed bandit task using Kalman filter modeling to investigate altered computational parameters in smokers.
- Developed a hierarchical Bayesian implementation of the Hierarchical Gaussian Filter within the hBayesDM package

PUBLICATIONS

- Lee, J. H., Jeong, J. W., Busemeyer, J. R., O'Donnell, B. F., & Ahn, W.-Y. *Overestimated Environmental Volatility Underpins Aberrant Decision Making in Type-I Bipolar Disorder.* Manuscript in preparation.
- Lee, H. M., Jeon, J. W., Lee, J. H., Shim, W. M., & Ahn, W.-Y. *Naturalistic Foraging Reveals Latent Signatures of Value-Guided Exploration During Nicotine Abstinence.* Manuscript in preparation.

POSTER PRESENTATIONS

- Lee, J. H., Jeong, J. W., Busemeyer, J. R., O'Donnell, B. F., & Ahn, W.-Y. (2026, July). *Overestimated Environmental Volatility Underpins Aberrant Decision Making in Type-I Bipolar Disorder.* Poster to be presented at the 2026 Computational Psychiatry Conference, Yale University, New Haven, CT, USA.
- Lee, J. H., & Ahn, W.-Y. (2024, December). *The Effect of Self-Concept Clarity on Social Evaluative Information Learning: A Computational Approach.* Poster presented at the Brain, Mind, & Behavior Symposium, Seoul National University, Seoul, South Korea.

ONGOING PROJECTS

- Investigating (1) how action values are represented and altered at the computational and neural levels (2) and these values relate to psychometric trait including impulsivity, anxiety and risk-taking in alcohol high-risk individuals by applying IRL (Inverse Reinforcement Learning) algorithm to the

naturalistic pedestrian task.

HONORS & AWARDS

Best Poster Award, Brain, Mind, & Behavior Symposium, Seoul National University (2nd Place) Dec 2024

SKILLS

Computational Modeling: Hierarchical Bayesian modeling using STAN

Programming: Python, R, Stan, MATLAB

LANGUAGES

Korean (Native), English (Advanced)