Neural mechanisms of human social cognition

Project Leader

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1. Objective

This project is aimed at:

Investigation of the neural mechanisms of uniquely human social cognitive processes including social motivation, decision-making, and attitudes. Our research delves in particular into four primary areas: 1) social decision-making (including neuroeconomics and neuromarketing); 2) social and cognitive influences on attitudes (such as social conformity and cognitive dissonance); 3) prejudices and stereotypes; and 4) the self (aspects such as self-concept and self-esteem). Our project examines the neural bases of these social cognitions/behaviors, for the most part using a functional magnetic resonance imaging (fMRI) technique.

2. Project Outline

To achieve those aims, the project will consist of the following phases:

(a) Crafting experimental paradigms to explore the neural underpinnings of the aforementioned social and cognitive processes;

(b) Collection of fMRI and behavioral data; and

(c) Conducting statistical analyses of the collected data.

3. Expected Performance

In this project, the successful candidate would be expected to:

(a) Complete the aforementioned three phases effectively for at least one of the four objectives outlined above, under the guidance of the project leader;

(b) Develop their expertise in both fMRI data collection and analysis; and

(c) Enhance their understanding of and insight into the psychology and neuroscience literature related to the topic

4. Required Skills and Knowledge

The successful candidate for this project will have the following knowledge and skills:

(a) Strong intellectual curiosity about psychology and neuroscience concerning human social cognition;

(b) Proficiency in programming languages (e.g., Matlab, Python);

(c) Demonstrable good written and oral communication skills;

(d) Relevant experience in conducting psychological research (behavioral experiments); and

(e) Evidence of an advanced understanding of statistical analysis and its interpretation.

Project leader's webpage:

https://sites.google.com/view/izumalab/home

University admission guidelines:

https://www.kochi-tech.ac.jp/english/admission/ssp_aft19oct/ssp_application_guideline.html

Contact

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