# **ZHIXING SUN**

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# **EDUCATION**

Brandeis University Waltham, MA

Master of Arts in Psychology (Advisor: Prof. Jennifer Gutsell), GPA: 4.0/4.0

August 2023 - May 2025

• Thesis: The Effect of Spatial Attention on Same-Culture/Race Bias in Emotion Processing

Kenyon College Gambier, OH

Bachelor of Arts with Honors in Psychology, summa cum laude

August 2019 - May 2023

#### RESEARCH INTERESTS

#### **Topics**

· Social Perception, Social Neuroscience, Group Bias, Empathy, Face Processing

#### Methods

General Linear Modeling, Structural Equation Modeling, Electroencephalogram (EEG), Event-related Potentials (ERP)

# **CONFERENCE PRESENTATIONS**

- Frank, J.E., **Sun, Z.**, Gutsell, J.N. (May 2025). *Frontal Alpha Asymmetry and Political Group Bias Toward Sadness Members*. Poster to be submitted at the *Annual Meeting for Trends in Psychology Summit*, Boston, MA.
- **Sun, Z.** and Gutsell, J.N. (April 2025). *Attention and Self-race Bias: How Spatial Cues Affect Emotion Recognition Across Racial Group Memberships.* Poster submitted to the *Annual Meeting for the Social and Affective Neuroscience Society*, Chicago, IL.
- **Sun, Z.**, Franks, J.E., and Gutsell, J.N. (February 2025). *Cultural Orientation and Emotional Resonance: Increased EEG Neural Synchrony with Political Ingroup Sadness*. Poster to be presented at the *Annual Convention of the Society of Personality and Social Psychology*, Denver, CO.
- **Sun, Z.** and Engell, A.D. (April 2023). *Cultural Differences in Holistic Processing: A Behavioral and EEG Study.* Data Blitz Talk given at the *Midwestern Psychological Association*, Chicago, IL.

# RESEARCH EXPERIENCE

#### **Empathy Systematic Review Project - Extraction Phase**

Waltham, MA

Group Project, Social Interaction and Motivation Lab at Brandeis University

Dec. 2024 – Present

- Extracted key entities and constructs from empathy-related literature to build a comprehensive database for a systematic review
- Completed structured templates for articles to generate machine-readable plain-text files using designated packages in R
- Validated resource-intensive entities in extracted templates with the Extraction Validation App (EVA) to ensure accuracy

#### The Effect of Spatial Attention on Same-Culture/Race Bias in Emotion Processing [1]

Waltham, MA

Master's Thesis, Social Interaction and Motivation Lab at Brandeis University

Aug. 2023 - Present

- Conducted an EEG/ERP study to examine how spatial attention shapes bias in processing emotions across cultural/racial groups
- Assessed different neural markers as participants viewed emotions categorized by cultural/racial group membership
- Replicated previous findings demonstrating that emotion processing is not entirely involuntary or exogenous
- Investigated that spatial attention amplifies the preferential processing of emotional expressions from ingroup members
- Suggested that cultural/racial bias in emotion processing depends on focal attention with variability influenced by the target's cultural/racial identity

### **Delayed Synchrony Study**

Waltham, MA

Group Project, Social Interaction and Motivation Lab at Brandeis University

Apr. 2024 - Dec. 2024

- Led EEG sessions to investigate neurological processes underlying empathy and action processing across political beliefs
- Analyzed cultural orientation effects on sensorimotor resonance (mu suppression) by political group membership
- Assessed frontal asymmetry differences in response to emotions displayed by affiliated political group members
- Found that collectivism levels predicted sensorimotor resonance in response to political ingroup sadness

#### **Cultural Differences in Holistic Face Processing**

Gambier, OH

Undergraduate Honors Thesis, with Prof. Andrew Engell, Kenyon Psychological Neuroscience Lab

Sept. 2022 - May 2023

- Developed a behavioral and EEG study to examine how cultural identity influences face perception skills
- Designed a visual paradigm with 320 Mooney and scrambled faces to assess reaction time and accuracy rate
- Analyzed behavioral performance and N170 ERP data across 20 participants from two different cultural backgrounds
- Found no significant differences in behavioral performance or N170 ERP between cultural groups in identifying Mooney faces
- Suggested that holistic face processing is distinct from other visual processing shaped by cultural identity

# **HONORS & AWARDS**

GSAS Master's Student Conference and Research Award
Graduate Students Affair (GSA) Travel and Research Grant
Master's Merit Scholarship
Departmental Honors Thesis
Dean's Merit List
Brandeis University, 2024
Brandeis University, 2023
Kenyon College, 2023
Kenyon College, 2020 - 2023

# **TEACHING EXPERIENCE**

Teaching Assistant at Brandeis University:

PSYC34b: Social Psychology
PSYC52a: Research Methods and Laboratory in Psychology
PSYC51a: Statistics
Spring 2025
Fall 2024
PSYC51a: Statistics

Course Tutor at Kenyon College:

PSYC200: Statistical Analysis in Psychology Fall 2022 and Spring 2023

# **SKILLS**

Statistical Data Analysis: R, SPSS, JASP Programming: MATLAB (EEGLAB), Python Language: Mandarin, English, and Japanese Standardized Test: GRE (V160 + Q170)

## REFERENCES

#### Dr. Jennifer Gutsell

Associate Professor of Psychology Department of Psychology Brandeis University jgutsell@brandeis.edu

#### Dr. Xiaodong Liu

Associate Professor of Psychology Department of Psychology Brandeis University xliu0806@brandeis.edu

#### **Dr. Andrew Engell**

Associate Professor of Psychology Department of Psychology Kenyon College engella@kenyon.edu