Serena J. Gu 顾静睿

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EDUCATION

2020 - 2022 **Teachers College, Columbia University**, New York, NY

M.A., Clinical Psychology

Mentor: Lisa M. Ranzenhofer, Ph.D.

Thesis: Self-Referential Processing Biases in Patients with Anorexia Nervosa

2017 - 2020 University of Toronto, Innis College, Toronto, ON

HBSc with Distinction

Specialist in Psychology, Major in Industrial Relations and Human Resources

Mentors: Brett A. Cochrane Ph.D. & Jay Pratt Ph.D.

RESEARCH INTERESTS

Conceptual interests: Transdiagnostic mechanisms of internalizing (anxiety, depression, eating) disorders, especially maladaptive decision-making, and learning

Methodological interests: Computational modeling and multi-modal approaches (neurocognitive tasks, neuroimaging (fMRI and EEG), and ecological momentary assessments); Gamification of neurocognitive tasks

AWARDS

2024 Computational Modeling Workshop Travel Award (~\$500),

Scientific Research Network on Decision Neuroscience and Aging

PEER-REVIEWED PUBPLICATIONS

1. **Gu, S. J.**, Aimufua, I., Pagliaccio, D., Shankman, S. A., Steinglass, J. E., Auerbach, R. P., Walsh, B. T. & Ranzenhofer, L. M. (2024). Self-referential processing in anorexia nervosa. *International Journal of Eating Disorders*, *57*(5), 1234-1244. doi: 10.1002/eat.24176

PAPER PRESENTATIONS

- 5. Lloyd E. C., Muratore A. F., Hu S., **Gu S. J.**, Pines J., Foerde K., Peña-González M., Ehrlich S., Thompson P., Steinglass J. (2024, September) *Developing ENIGMA protocols for large-scale analysis of white matter roperties in anorexia nervosa*. Eating Disorders Research Society (EDRS), Spain, Sitges.
- 4. **Gu, S. J.**, Aimufua, I., Pagliaccio, D., Shankman, S. A., Steinglass, J., Auerbach, R. P., & Ranzenhofer, L. M. (2023, June). *Self-referential processing biases in patients with anorexia nervosa*. [Paper Presentation] International Conference on Eating Disorders (ICED), United States, Washington D.C.
- 3. Patmore, J., Ranzenhofer, L. M., Attia, E., **Gu, S. J.**, Xu, S., & Kalach, V. (2022, June). *The role of alliance in a peer mentorship program for individuals with eating disorders*. [Paper Presentation] International Conference on Eating Disorders (ICED) (Virtual Conference).
- 2. Patmore, J., Ranzenhofer, L. M., Attia, E., Kalach, V., **Gu S. J.**, Chiao, S., Nathan, R., Akason, T., Atri, E., Clarizio, D., Agrawal, P., & Farber, B. (2022, July). *How patient knowledge of provider lived experience with an eating disorder facilitates positive outcomes*. [Panel Discussion] Society for Psychotherapy Research (SPR), University of Denver, Denver, Colorado.
- 1. Patmore J., Sinclair C., Cao E., Ng S., Mayall D., Agrawal P., **Gu S. J.**, Chiao S., & Kalach V. (2021, July). *The utility of lived experience with an eating disorder as a therapeutic tool to facilitate client self-disclosure: An evaluation of a peer-based community support group.* [Paper Presentation] Society for Psychotherapy Research (SPR), United States (Virtual Conference).

POSTER PRESENTATIONS

- 6. Lloyd E. C., Ojeda J. **Gu S. J.**, Foerde K. E., Ligaya K., Shohamy D., Steinglass J. (2024, March) *Can thinking about the future increase food intake now in anorexia nervosa*. International Conference for Eating Disorders (ICED), United States, New York.
- 5. Ranzenhofer, L., Trivedi, E., Aimufua, I., **Gu S. J.**, Steinglass J., Auerbach R. P. (2023, September) *Passive sensing of social processes in adolescents with an eating disorder.* Eating Disorders Research Society (EDRS), United States, Boston.

- 4. Aimufua, I., Ranzenhofer, L., Gu S. J., Steinglass, J., Walsh, B. T. (2023, June) Concordance of the EDE-O and EDE-12 in a clinical sample of patients with eating disorders. International Conference on Eating Disorders (ICED), United States, Washington D.C.
- 3. Tang J. E., Kurylo, D. D., Gu S. J., Jain, M., Waxman, R., & Gordon, P. (2021, May). Neural correlates of visual perceptual organization (PO) in an EEG oddball paradigm. Association for Psychological Science (APS), United States (Virtual Conference).
- 2. Cochrane B.A., Gu S. J. & Pratt J. (2020, November). Are event files due to a long-term or a short-term memory process? The Psychonomic Society 61st Annual Meeting (Virtual Conference).
- 1. Cochrane B.A., Gu S. J. & Pratt J. (2020, June). Are Event Files due to a long-term or a short-term memory process? The Transdisciplinary Research Association on Cognition and Embodiment 7th Annual Meeting, Germany, Würzburg (Cancelled Conference).

PROFESSIONAL PRESENTATIONS

1. Gu S. J. (2024, August). Moderator. In Hagan, K., & Johnson-Munguia, S. (Speakers) Atypical anorexia nervosa: From current insights and challenges to future research directions? Academy for Eating Disorders, Online Webinar.

RESEARCH EXPERIENCE

Jul 2022-Jun 2024 Clinical Research Coordinator, Translational Research on Eating & Affect Lab

- [40hrs/week] O Sole coordinator for multi-modal neuroimaging and neurocognitive studies investigating the mechanisms of eating disorders, primarily bulimia nervosa
 - O Supervised undergraduate research interns (N=2) and held weekly 1-1 meetings with them

Study: Deciphering the Cognitive and Neural Underpinnings of Risk-Taking in Eating Disorders -Kelsey E. Hagan, Ph.D., BIRCWH, K12 AR084233

- O Developed REDCap survey pipeline for participant registry
- O Created EMA questionnaires assessing eating behaviors and emotions in ison format on PiLR
- O Administered clinical (MINI, EPSI-CRV, SCID, Age of Onset) and cognitive assessments (WASI-II)
- O Adapted one neurocognitive task for online use and one for MRI
- O Administered fMRI (and neuromelanin) scans to adolescents and young adults with bulimia nervosa

Jul 2022-Jun 2024 [40hrs/week] Aug 2021-Aug 2022 [20hrs/week]

Clinical Research Coordinator, COLUMBIA CENTER FOR EATING DISORDERS

- O Primary coordinator for three neuroimaging studies examining mechanisms of eating disorders (behaviors) and one ten-year longitudinal study following up with patients post-inpatient treatment
- O Coordinated recruitment, screening, and admission processes for patients on the inpatient unit
- O Administered clinical (EDA-5, SCID, K-SADS, Age of Onset) and cognitive assessments (WASI)
- O Managed data collection, entry, and cleaning from databases (CRMS, REDCap, kisEMR, paper charts)
- Preprocessed the MRI data with fMRIPrep and Ciftify pipeline and reviewed quality assurance outputs
- O Coded (N=6) three behavioral and three scanner versions of neurocognitive tasks in PsychoPy (Food Choice Task (FCT), Two Step Task (TST), Incentive Flanker Task (IFT), available on GitHub)

Study: Restrictive and Binge Eating during Adolescence: the Role of Self-Related Cognitions and Social Stress - Lisa M. Ranzenhofer, Ph.D., K23 MH121780

- Coordinated study meetings, research procedures, and research compliance activities
- O Ran EEG and multi-item meal procedures (N=~40) with adolescents with/without eating disorders
- O Administered the Age of Onset and six-month follow-up interviews with participants
- O Managed EEG, EMA, and behavioral data collection and cleaning

Study: The Physiology of the Weight Reduced State - Laurel S. Mayer, M.D., UG3 DK128302

- O Coordinated study meetings and research procedures
- O Developed REDCap survey pipeline with complex logic tools and piloted FCT at a new MRI center
- O Ran MRI (neuromelanin, DTI) and meal procedures with weight-reduced individuals (N=~10)
- Trained coordinators at collaborating sites to set up and administer a neurocognitive task

Study: The Role of Dopamine in the Persistence and Remission of Anorexia Nervosa during Adolescence - Blair W. Uniacke, M.D., Brain & Behavior Research Foundation NARSAD 2021

- O Communicated with IRB, coordinated study meetings, procedures, and research compliance activities
- O Ran MRI (neuromelanin) scans (N=~30) on adolescents/young adults with/without eating disorders
- O Administered the Two Step Task and the Age of Onset interview with participants
- O Prepared behavioral and neuromelanin scan data for analysis

Study: Longitudinal Follow-up for the Eating Disorders Research Unit - Evelyn Attia, M.D.

- O Coordinated research compliance activities and aided transfer from local IRB to commercial IRB
- O Consented (and assented if < 18 years old) patients (and parents) for the study
- O Managed database (N=~500) and data collection with 10-year and 20-year follow-up questionnaires

Jun 2021-Jun 2022 Graduate Research Assistant, COLUMBIA NEUROIMAGING LAB

[10hrs/week] Study: Aging and Cognitive Reserve Using Magnetic Resonance Spectroscopy - Yunglin Gazes, Ph.D.

- O Preprocessed MRS data with INSPECTOR neuroimaging tool and ran LCM analysis
- Conducted literature search on MRS studies in aging-related topics and cognitive reserve

Nov 2020-Jul 2022 Graduate Research Assistant, SUICIDE RESEARCH LAB

[5hrs/week] Study: Suicide Prevention: Safety Plan Evaluation - Christa Labouliere, Ph.D.

- O Evaluated and coded Stanley-Brown Suicide Prevention Safety Plan (N=378) via REDCap
- O Discussed with team members to reach a consensus on ambiguous safety plans

Study: Social Stress in People with Suicide Intent and Ideation - Barbara H. Stanley, Ph.D.

- O Ran the Trier Social Stress Test (TSST) experiments (N=~20) and briefed participants afterward
- O Accompanied participants (suicide attempters/ideators/healthy control) to blood draws

Nov 2020-Jun 2021 Graduate Research Assistant, EATING DISORDERS & DISCLOSURE LAB

[5hrs/week] Study: Project Healing: The Utility of Lived Experience with Eating Disorders as a Therapeutic Tool: an Evaluation of Peer-Based Community Support Group - Jacqueline Patmore, Ph.D.

- O Coded qualitative survey responses from Qualtrics and visualized the data in slides
- O Edited an abstract and slides for two conference presentations

Nov 2020-Jun 2021 Graduate Research Assistant, LANGUAGE AND COGNITIVE NEUROSCIENCE LAB

[10hrs/week] Study: Neural Correlates of Visual Perceptual Organization in Patients with Schizophrenia/Schizotypal Personality Disorder using EEG and Gazepoint - Jean E. Tang, Ph.D. & Peter Gordon, Ph.D.

- O Developed visual experiment to examine perceptual organization in schizophrenia via PsychoPy
- O Cleaned Gazepoint and behavioral data from Qualtrics and ran ANOVA in Python

Jan 2020-May 2020 Undergraduate Research Assistant, VISUAL COGNITION LAB

[8hrs/week] Study: Event Files in Short/Long-Term Memory- Brett A. Cochrane, Ph.D. & Jay Pratt, Ph.D.

- O Recruited participants and ran behavioral experiments in PsychoPy (N=25)
- O Performed t-test and two-way ANOVA in R and edited a manuscript

Nov 2019-May 2020 Undergraduate Research Assistant, Anxiety Research and Treatment Lab

[2hrs/week] Study: Reassurance Behaviors in Body Dysmorphia - Olivia Provost-Walker & Martin Antony, Ph.D.

- O Recruited participants with various platforms, connections, and resources efficiently
- O Conducted literature review on body dysmorphic disorder and reassurance behaviors

May 2019-May 2020 Undergraduate Research Assistant, MIND AND BODY LAB

[4hrs/week] Study: The Effect of Pain on Moral Judgments - Spike Lee, Ph.D.

- O Ran 15-minute moral experiments with individuals of different races/ethnicities off-campus
- O Collected data, accurately entered the data, and assisted in literature review on embodiment
- O Coded qualitative data for MTurk datasets (N=2000)

ASSESSMENT TRAINING

Jul 2024-Present Assessor, Translational Research on Eating and Affect Lab Supervised by Kelsey E. Hagan, Ph.D.

- O Administered the following semi-structured clinical interview:
 - Mini-International Neuropsychiatric Interview (M.I.N.I.)
 - Eating Pathology Symptoms Inventory Clinician Rated Version (EPSI-CRV)
 - Eating Disorder Diagnostic Interview (EDDI)
 - Structured Clinical Interview for DSM-5 Disorders (SCID-5)
 - Age of Onset (AOO) interview
- O Administered the following cognitive assessments:
 - Wechsler Abbreviated Scale of Intelligence II (WASI-II)

Jul 2022-Jun 2024 Assessor, Columbia Center for Eating Disorders

Supervised by Lisa M. Ranzenhofer, Ph.D. and Alexandra F. Muratore, Ph.D.

- O Administered the following semi-structured clinical interview:
 - Structured Clinical Interview for DSM-5 Disorders (SCID-5)
 - Kiddie Schedule for Affective Disorders and Schizophrenia (K-SADS)
 - Eating Disorder Assessment for DSM-5 (EDA-5)
 - Age of Onset (AOO) interview
- O Administered the following cognitive assessments:
 - Wechsler Abbreviated Scale of Intelligence I & II (WASI-I & WASI-II)

CLINICAL EXPERIENCE

Jul 2022-Jun 2024 Attendee and Presenter at Rounds, Inpatient Unit at Columbia Center for Eating Disorders Supervised by Blair W. Uniacke, M.D.

- O Attended rounds to discuss details and progress about patients on the inpatient unit
- O Presented scheduled research procedure and research eligibility during rounds
- Sep 2023-Nov 2023 Attendee, Cognitive Behavioral Therapy Class at Columbia Center for Eating Disorders Supervised by Dr. Michael J. Devlin, MD
 - O Attended the CBT classes with medical residents and reviewed relevant class materials
 - O Shadowed residents conducting CBT activities with patients on the inpatient unit for eating disorders, including cognitive/behavioral model, decision analysis, cognitive distortion, and relapse prevention
- Sep 2021-Apr 2022 Study Therapist (Coach), R01 MH115128
 - [4hrs/week] Study: Harnessing Mobile Technology to Reduce Mental Health Disorders in College Populations (iAIM EDU) - Elsa Rojas, Ph.D. & Ellen Fitzsimmons-Craft, Ph.D.
 - O Provided feedback for college-student users with eating disorder/anxiety/depression on their progress
 - O Attend weekly one-hour supervision on how to provide positive feedback as a coach using CBT skills
 - O Used digital CBT evidence-based treatment tools to encourage users to utilize self-guided modules
- May 2019-Aug 2019 Phone Interviewer, WORKPLACE SAFETY & INSURANCE BOARD, SURVEY UNIT

[10 hrs/week] O Conducted 10-20-minute phone interviews with injured workers, employers, and providers about their experience handling workplace injuries

TEACHING EXPERIENCE

- Feb 2023 **Teaching Assistant**, Eye Tracking Methods and Dynamic Data Analysis
- Jan 2022 Graduate psychology class: BSSN 4070 by Peter Gordon, Ph.D. at TC, Columbia University
- May 2021 O Delivered a 90-minute lecture on designing and creating experiments using PsychoPy
 - Presented how to create Stroop Task, Posner Task, and Perceptual Organization Task
- Jan 2022 **Teaching Assistant**, Explorations in Madness: Schizophrenia and Other Psychotic Disorders Graduate clinical psychology class: CCPX 4070 by Paul Saks, Ph.D. at TC, Columbia University
- Teaching Assistant, Adult Personality and Psychopathology Sep 2021 Graduate clinical psychology class: CCPX 5032 by Paul Saks, Ph.D. at TC, Columbia University
 - O Contributed to the development of teaching materials (e.g. syllabus)
 - O Performed teaching duties and assisted assessment of homework, assignments, and exams

SERVICE

Aug 2018-Apr 2019 Residence Advisor, UNIVERSITY OF TORONTO, SCARBOROUGH

- [25 hrs/week] O Promoted inclusivity through facilitated dialogue, community development, and peer education
 - O Highly flexible and reliable to students seeking support for academic/personal/community concerns
 - O Responded to all emergencies, crisis in residence, and documented incidents appropriately/timely
 - O Planned and hosted various biweekly events for 30-40 students within the expected timeframe

Apr 2018-Apr 2019 Student Academic Advisor, UNIVERSITY OF TORONTO, SCARBOROUGH

- [10 hrs/week] O Screened student inquiries and directed them to appropriate resources over the phone
 - O Answered academic questions from undergraduate students, including course selection, resume/CV revision, and job search, and scheduled academic advising appointments for them
 - O Wrote blogs to communicate effective study skills, exam preparation, and learning

CODING AND TASK DEVELOPMENT

2024 Maggie's Farm Task, Dubois et al., 2021, Adapted the web-app version to local launching 2023 Web Surf Task, Abram et al., 2019, Coded behavioral/MRI version in Python and remote version in JavaScript 2022 Incentive Flanker Task, Norman et al., 2021, Coded behavioral/MRI version in Python 2021 - 2023 **Two Step Decision Task**, Foerde et al., 2021, Coded the behavioral/MRI version in Python 2020 - 2023 Food Choice Task, Steinglass et al., 2014; Foerde et al., 2015, Created behavioral/MRI version in PsychoPy Builder and recoded the task in Python 2020 Visual Perceptual Organization Task, Kurylo et al., 2018, Created behavioral/eye-tracking version in PsychoPy Builder SKILLS Languages Mandarin, English Scripting Languages Python, JavaScript, bash Questionnaires REDCap, Qualtrics, Google Forms Web Server HPC cluster (Ginsburg at Columbia) Recruitments RecruitMe, SONA, MTurk Experiments PsychoPy, Pavlovia (PsychoJS), JavaScript (Web App), E-prime 3.0, MATLAB MRI fMRIPrep, freesurfer, FSL EEG BrainVision, EEGLab MRS INSPECTOR EMA EARS, PiLR Eye Tracking Gazepoint, EyeLink Statistics Python, SPSS, R, STATA Analysis HDDM, HSSM, ANOVA, (multiple) linear regression, chi-square PROFESSIONAL AFFILIATIONS 2023 - Present Association for Behavioral and Cognitive Therapies (ABCT) 2023 - Present ABCT Neurocognitive Therapies/Translational Research (NTTR) SIG 2023 - Present Academy for Eating Disorders (AED) 2022 - Present American Psychological Association (APA)