ELIZABETH C. STADE, PH.D.

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EMPLOYMENT AND EDUCATION

Stanford University

beginning Oct. 2023

Postdoctoral Research Fellow, Departments of Psychiatry and Behavioral Sciences and Psychology Advisors: Shannon Wiltsey Stirman, Ph.D., and Johannes Eichstaedt, Ph.D.

University of Pennsylvania

2017 - 2023

Ph.D., Clinical Psychology (APA- and PCSAS-accredited)

<u>Dissertation:</u> Novel Methods of Assessing and Classifying Depression, Anxiety, and Perseverative Thought

University of Pennsylvania

2017 - 2018

M.A., Psychology

Thesis: A Novel Measure of Real-Time Perseverative Thought

Barnard College, Columbia University

2011 - 2015

B.A., Psychology & Religion (summa cum laude)

GRANTS AND FELLOWSHIPS

National Science Foundation, Graduate Research Fellowship Program (\$138,000) 2018 – 2021

University of Pennsylvania, Benjamin Franklin Fellowship (\$130,000) 2017, 2021 – 22

University of Pennsylvania, Graduate Research & Travel Awards (total \$3,717) 2018 – 2022

HONORS AND AWARDS

Society for Research in Psychopathology

2022

Smadar Levin Award preliminary finalist (for the most outstanding submission from a graduate student)

Barnard College, Columbia University

2015

Phi Beta Kappa, Mary E. Allison Prize (for academic excellence), Psychology Faculty Recognition Prize

RESEARCH INTERESTS

- Quantitative/behavioral methods for psychopathology assessment, including Natural Language Processing, intensive longitudinal, and machine learning methods
- Diagnosis and classification of depression, anxiety, and PTSD; validity of transdiagnostic or dimensional approaches
- Characterization and real-time measurement of worry, rumination, and their umbrella construct perseverative thought
- Ecological momentary interventions, mechanisms of treatment response, therapist fidelity in the cognitive behavioral therapies

PUBLICATIONS

- **Stade, E. C.,** DeRubeis, R. J., Ungar, L., & Ruscio, A. M. (in press). A transdiagnostic, dimensional classification of anxiety shows improved parsimony and predictive noninferiority to *DSM*. *Journal of Psychopathology and Clinical Science*. https://psyarxiv.com/vkbnh
- **Stade, E. C.,** Ungar, L., Eichstaedt, J. C., Sherman, G., Ruscio, A. M. (2023). Depression and anxiety have distinct and overlapping language patterns: Results from a clinical interview. *Journal of Psychopathology and Clinical Science*. Advance online publication. https://doi.org/10.1037/abn0000850
- **Stade, E. C.,** Ungar, L., Havaldar, S., Ruscio, A. M. (2023). Perseverative thinking is associated with features of spoken language. *Behaviour Research and Therapy*. Advance online publication. https://doi.org/10.1016/j.brat.2023.104307
- **Stade, E. C.,** & Ruscio, A. M. (2022). A meta-analysis of the relationship between worry and rumination. *Clinical Psychological Science*. 11(3), 552-573. https://doi.org/10.1177/21677026221131309
- **Stade, E. C.,** Cohen, R., Loftus, P., & Ruscio, A. M. (2022). A novel measure of real-time perseverative thought. *Clinical Psychological Science*. 10(3), 534–552. https://doi.org/10.1177/21677026211038017
- Costi, S., Soleimani, L., Glasgow, A., Brallier, J., Spivack, J., Schwartz, J., Levitch C. F., Richards, S., Hoch, M., **Stade, E. C.,** Welch, A., Collins, K. A., Feder, A., Iosifescu, D. V., Charney, D. S., & Murrough, J. W. (2019). Lithium continuation therapy following ketamine in patients with treatment resistant unipolar depression: a randomized controlled trial.

 Neuropsychopharmacology, 44, 1812–1819. https://doi.org/10.1038/s41386-019-0365-0
- Murrough, J. W., **Stade, E. C.**, Sayed, S., Ahle, G., Kiraly, D. D., Welch, A., Collins, K. A., Soleimani, L., Iosifescu, D. V., & Charney, D. S. (2017). Dextromethorphan/quinidine pharmacotherapy in patients with treatment resistant depression: A proof of concept open

- label clinical trial. *Journal of Affective Disorders*, 218, 277-283. https://doi.org/10.1016/j.jad.2017.04.072
- **Stade, E. C.,** & Iosifescu, D.V. (2016). Using EEG for treatment guidance in major depressive disorder. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 1*(5), 411-422. https://doi.org/10.1016/j.bpsc.2016.06.002

Under Review

Stade, E. C., Wiltsey Stirman, S., Ungar, L., Schwartz, H. A., Sedoc, J., Willer, R., Yaden, D. B., DeRubeis, R. J., Eichstaedt, J. C. (under review). Large language models will change the future of psychotherapy: A proposal for responsible, psychologist-led development. Preprint: https://psyarxiv.com/cuzvr

In Preparation

- **Stade, E. C.,** Giorgi, S., Curtis, B., Ungar, L. (in prep.). The language of social desirability: Further evidence for a relationship with self control.
- Stephenson, A., **Stade, E. C.,** Ruscio, A.M. (in prep.). Behavioral reactions to social evaluation: Extending the Social Performance Rating Scale to generalized anxiety disorder and major depressive disorder.

PRESENTATIONS

- Friedman, J., **Stade, E. C.,** & Ruscio, A. M. (2022, November). Worry and rumination differ in their prediction of generalized anxiety disorder and major depressive disorder. Poster presented at the Annual Meeting of the Association for Behavioral and Cognitive Therapies, New York, NY.
- **Stade, E. C.,** Ungar, L., & Ruscio, A. M. (2022, September). A language-based model of perseverative thinking. Poster and flash talk presented at the Society for Research on Psychopathology Annual Meeting, Philadelphia, PA.
- Stephenson, A., **Stade, E. C.,** & Ruscio, A. M. (2021, November). *Measuring behavioral reactions to social stress in generalized anxiety disorder and major depressive disorder.* Poster presented at the Annual Meeting of the Association for Behavioral and Cognitive Therapies, New Orleans, LA.
- Stephenson, A., **Stade, E. C.,** & Ruscio, A. M. (2020, November). Relationship of reward responsiveness to severity and course features of major depressive disorder. Poster presented at the Annual Meeting of the Association for Behavioral and Cognitive Therapies, Philadelphia, PA.
- **Stade, E. C.,** Loftus, P., Cohen, R., & Ruscio, A. M. (2019, March). *A novel measure of real-time perseverative thought.* Poster presented at the Annual Meeting of the Anxiety and Depression Association of America, Chicago, IL.

- Murrough, J. W., **Stade, E. C.**, Sayed, S., Ahle, G., Kiraly, D. D., Welch, A., Collins, K. A., Soleimani, L., Iosifescu, D. V., & Charney, D. S. (2016, December).

 Dextromethorphan/quinidine combination as a novel pharmacotherapeutic approach in patients with treatment resistant depression. Poster presentation at American College of Neuropsychopharmacology, Hollywood, FL.
- Stade, E. C., Aull, A., Ruyter-Harcourt, I., Rosenberg, M., Garduño, O., Banning, T., Liu, S., Shapiro, L., Sehayik, T., Levenson, L., Hong, K. E., & Heuer, L. (2014, March). *Deservingness beliefs as a moderator of procedural fairness in police-civilian encounters.* Poster presentation at the annual meeting of the Eastern Psychological Association, Boston, MA.
- Jackson, M., Ruyter-Harcourt, I., Stiller, M., Kassan, M., Davids, M., **Stade, E. C.**, & Heuer, L. (2013, March). *Deservingness and status as moderators of procedural fairness*. Poster presentation at the annual meeting of the Eastern Psychological Association, New York, NY.

RESEARCH EXPERIENCE

Stanford University, Department of Psychiatry and Behavioral Sciences

National Center for PTSD, Dissemination and Training Division

Research Intern, Fidelity Adaptation Sustainability & Training Lab (PI: Shannon Wiltsey Stirman, PhD)

• Developing an AI and machine learning measure of therapist fidelity to evidence-based psychotherapy; analyzing data from an NIMH-funded study of a trauma-focused asynchronous messaging therapy (cognitive processing therapy for PTSD); developing and studying applications for AI and large language models to psychotherapy.

University of Pennsylvania, Department of Psychology Graduate Research Assistant, Boundaries of Anxiety and Depression Lab (PI: Ayelet Ruscio, PhD)

 Performed advanced data analysis using R, python, and SQL (e.g., machine learning, Natural Language Processing [NLP], Hierarchical Linear Modeling), led meta-analytic investigation of the worry-rumination relationship (719 included effect sizes); developed line of NLPfocused research and led large team of research assistants in transcribing 600+ clinical interview audio recordings

Icahn School of Medicine at Mount Sinai, Department of Psychiatry Jun. 2015 – Jun. 2017 Clinical Research Coordinator, Depression and Anxiety Center (PIs: James Murrough, MD, PhD; Dan Iosifescu PhD)

 Administered neuroimaging (EEG) and behavioral tasks (Probabilistic Reward Task; Effort Expenditure for Rewards Task); initiated and led overhaul of lab's data capture system; designed REDCap databases for complex, multi-arm studies investigating the efficacy and safety of novel treatments for mood and anxiety disorders; performed clinical assessments before, during, and after administrations of investigational pharmacotherapies (including ketamine and monoclonal antibodies)

Icahn School of Medicine at Mount Sinai, Department of Psychiatry

2013 - 2015

Research Assistant, Depression and Anxiety Center (PIs: James Murrough, MD, PhD; Dan Iosifescu PhD)

• Administered semi-structured phone screens as part of recruitment efforts for clinical trials and basic research studies on mood and anxiety disorders; administered neurocognitive assessments, helped manage and develop study databases

Barnard College, Columbia University, Department of Psychology

2012 - 2015

Research Assistant, Procedural Justice Lab (PI: Larry Heuer, PhD)

• Supervised lab of ten undergraduates to standardize and implement experimental study on deservingness and interrogation methods; developed and managed data capture process

TEACHING

University of Pennsylvania

Abnormal Psychology (TA)
Introduction to Psychology (TA/Recitation Leader)

2019

2018

Barnard College

Statistics (Undergraduate TA)

2015

PROFESSIONAL SERVICE

Professional Affiliations

Anxiety and Depression Association of America Association for Behavioral and Cognitive Therapies

Ad Hoc Reviewer

Emotion

Journal of Consulting and Clinical Psychology

Journal of Experimental Psychopathology

Journal of Psychopathology and Clinical Science

University of Pennsylvania

Student Representative to the Clinical Faculty	2021 - 2022
Mentor, Penn Undergraduate Research Mentoring Program	2020 - 2021
Clinical Program Student Seminar Leader	2019 - 2020
Mentor, Graduate School Mentoring Initiative	2019 - 2020
Mentor, Big Sibling Program	2019 - 2020

CLINICAL EXPERIENCE

Veterans Affairs Palo Alto Health Care System

Psychology Internship (APA-accredited), Psychology Service

2022 - current

<u>Clinical Rotations:</u> Women's Health Psychology; Addiction Consultation & Treatment; Inpatient Psychiatry

Research Rotation: National Center for PTSD (PI: Shannon Wiltsey Stirman)

<u>Interventions:</u> Cognitive Processing Therapy (CPT); Prolonged Exposure Therapy (PE); Acceptance and Commitment Therapy (ACT); Cognitive Behavioral Therapy (CBT) for Chronic Pain

University of Pennsylvania

Psychotherapy Extern, Steven A. Cohen Military Family Clinic

2021 - 2022

Interventions: CPT; ACT

Study Diagnostician/Clinical Interviewer, Boundaries of Anxiety and Depression Lab 2017 – 2022

<u>Assessments:</u> Anxiety and Related Disorders Interview Schedule for DSM-5 (ADIS-5L); Hamilton Depression Rating Scale (HAM-D), Hamilton Anxiety Rating Scale (HAM-A)

Psychotherapy Extern, Center for the Treatment and Study of Anxiety

2020 - 2021

<u>Interventions:</u> PE, Exposure and Response Prevention for OCD, and exposure-based CBT for anxiety disorders

Psychotherapy Extern, Penn Cognitive Therapy Training Clinic

2019 - 2020

Interventions: CBT for depression; CBT for insomnia

Study Psychotherapist, Sleep Neurobiology and Psychopathology Lab Interventions: CBT for insomnia

2019 - 2020

Diagnosis & Assessment Extern, Assessment Clinic

2018 - 2019

<u>Assessments:</u> Wechsler Adult Intelligence Scale (WAIS-IV); Minnesota Multiphasic Personality Inventory-2 (MMPI-2); Diagnostic Interview for Anxiety, Mood, and OCD and Related Neuropsychiatric Disorders (DIAMOND); Structured Clinical Interview for *DSM-IV* Axis II Disorders (SCID-II)

Icahn School of Medicine at Mount Sinai

Study Diagnostician/Clinical Interviewer, Depression and Anxiety Center

2015 - 2017

<u>Assessments:</u> Structured Clinical Interview for DSM-IV (SCID-IV); Montgomery-Asberg Depression Rating Scale (MADRS)

Mount Sinai Saint Luke's and Roosevelt Hospitals

Sexual Assault/Domestic Violence Crisis Counselor, Crime Victims Treatment Center 2012 – 2015

SELECTED TRAININGS

<u>Veterans Affairs Palo Alto Health Care System</u> Cognitive Processing Therapy (CPT) for PTSD (2-day training)	2022
Cohen Veterans Network Suicide Prevention (1-day training)	2021
University of Pennsylvania, Center for the Treatment and Study of Anxiety (CTSA) Cognitive Behavioral Treatment of Social Anxiety Disorder (1-day training) Behavioral Approaches for Treating Generalized Anxiety Disorder (1-day training) Exposure and Ritual Prevention for Adult OCD (4-day training) Exposure and Ritual Prevention for Pediatric OCD (1-day training) Prolonged Exposure Therapy for Adult PTSD (4-day training) Prolonged Exposure Therapy for Adolescent PTSD (1-day training)	2021 2021 2020 2020 2020 2020
Corporal Michael J. Crescenz Veterans Affairs Medical Center (Philadelphia) Cognitive Behavioral Therapy for Insomnia (2-day training)	2019
CERTIFICATIONS	
University of Pennsylvania, Center for the Treatment and Study of Anxiety (CTSA) Certified Prolonged Exposure Therapist Certified Exposure and Response Prevention Therapist	2021 2021
New York State Department of Health Certified Rape Crisis Counselor	2013