# **Dawson Haddox**

Address: 1953 Hinman Hanover, NH 03755

Email: dawson.d.haddox.25@dartmouth.edu • Telephone: +1 304-382-6177

Website: https://ddhaddox.github.io/

#### **EDUCATION**

# **Dartmouth College** September 2021-June 2025 (Expected)

BA in Psychology, Minors in Computer Science and Philosophy

- Cumulative GPA: 3.96/4.00Psychology GPA: 4.00/4.00
- Honors Thesis: Naturalistic vs. Artificial Conversational Launchpads (Planned)
  - o Advisor: Thalia Wheatley, PhD
- Relevant Coursework: Abnormal Psychology; Forms of Therapy; Experimental Design, Methodology, and Data Analysis Procedures; Laboratory in Psychology; Modern Statistical Computing; Machine Learning; Deep Learning; Health Informatics; Network Science and Complex Systems

#### **AWARDS & GRANTS**

Neukom Institute for Computational Science Travel Grant (\$1,000)	2024
First Honor Group, Rufus Choate Scholar (Top 5% Annual GPA)	2024
UGAR Undergraduate Conference Grant (\$500)	2024
Bones Gate Academic Foundation (\$250)	2024
David C. Hodgson Endowment for Undergraduate Research Award (\$5,800)	2024
Second Honor Group (Top 15% Annual GPA)	2023
James O. Freedman Presidential Scholar (\$2,400)	2023
Bones Gate Academic Foundation (\$250)	2023
Third Honor Group (Top 35% Annual GPA)	2022

#### RESEARCH EXPERIENCE

**AI & Mental Health: Innovation in Technology-Guided Healthcare Lab** Aug 2023-Present *Biomedical Data Science and Psychiatry, Dartmouth Geisel School of Medicine* 

**Position:** Research Assistant

Supervisor: Nicholas Jacobson, PhD

**Responsibilities:** 

- Conducted an independent project to evaluate the psychometric properties and validity of an ecological momentary assessment measure of depression, resulting in a first-authored poster presentation and first-authored manuscript in preparation.
- Contributed to the writing and programming for manuscripts using deep learning to predict depression symptoms, depression variability, and PTSD symptoms with ecological momentary assessment and passive sensing data, resulting in a co-authored manuscript that is under review and one co-authored manuscript in preparation.
- Conducted literature searches and contributed to the writing for manuscripts using machine learning to predict responses to a positive imagery digital intervention for depression and to single session interventions for adolescent depression, resulting in a co-authored manuscript that is under review and a co-authored manuscript in preparation.
- Assisted in training a mental health chatbot by adapting therapy manuals for anxiety and eating disorders into patient-therapist dialogues and evaluating the performance of different model architectures.

### **Dartmouth Social Systems Lab**

Sep 2022-Present

Department of Psychological and Brain Sciences, Dartmouth College

**Position:** Presidential Scholar **Supervisor:** Thalia Wheatley, PhD

**Responsibilities:** 

- Assisted in fMRI scanning for a study on neural synchrony during independent and collaborative storytelling tasks; reviewed literature to identify methods for quantifying the accuracy of participants' free recall of each story; and explored various recall rating approaches, including hand-scoring, LLMs, semantic similarity analysis, and automated summary evaluation.
- Conducted an independent project to investigate the applicability of the peak-end rule to retrospective assessments of connection in conversation.
- Annotated instances of insider language in conversation recordings, designed categories and sub-categories to categorize hundreds of instances of insider language, and assisted with conducting analyses and creating visualizations.
- Corrected computer vision annotations on a recording of a social gathering to track the movement of different people into different social groups and in and out of the venue.

#### **Professor Charles T. Hill**

Department of Psychological Sciences, Whittier College

May 2024-Present

**Position:** Collaborator **Responsibilities:** 

- Designed and planned a cross-cultural study on feelings and behaviors in friendships, romantic partnerships, and parent-child relationships.
- Developed and refined a comprehensive Qualtrics questionnaire to survey participants on demographics, relationship characteristics and dynamics, and cultural norms.
- Coordinated with international professors to translate the questionnaire into Filipino, Japanese, and Italian.

### PEER-REVIEWED PUBLICATIONS

- Price, G. D., Langener, A. M., **Haddox, D.**, Heinz, M. V., Mackin, D. M., Nemesure, M. D., Collins, A. C., Griffin, T. Z., Pillai, A., Nepal, S., Lekkas, D., Campbell, A. T., & Jacobson, N. C. (invited resubmission). Predicting weekly variability in depressive symptoms among individuals diagnosed with Major Depressive Disorder using deep learning and passively gathered movement data. *Psychopathology and Clinical Science*.
- Collins, A. C., Price, G. D., Dainer-Best, J., **Haddox, D.**, Beevers, C. G., & Jacobson, N. C. (under review). Changes to positive self-schemas after a positive imagery training are predicted by participant characteristics in a sample with elevated depressive symptoms.

#### MANUSCRIPTS IN PREPARATION

- **Haddox, D.**, Mackin, D. M., Heinz, M. V., Nemesure, M. D., Collins, A. C., Price, G. D., Griffin, T. Z., Pillai, A., Nepal, S., Lekkas, D., Campbell, A. T., & Jacobson, N. C. (in prep). Assessing the psychometric properties and validity of a Mobile Patient Health Questionnaire-9 for ecological momentary assessment.
- Templeton, E., Chang, L., Cone LeBeaumont, M., Nook, E., **Haddox, D.**, Aiman, E., & Wheatley, T. (in prep). From talk to telepathy: The spontaneous use of insider language in conversation.
- Hill, C., **Haddox, D.**, Setiawan, J., Mari, S., & Sawaumi, T. (in prep). A cross-cultural analysis of feelings and behaviors in friendships, romantic partnerships, and parent-child relationships.
- Mackin, D. M., Dorris, H., **Haddox, D.**, Price, G. D., Kotov, R., Ruggero, C. J., Feltman, S. M., Luft, B. J., & Jacobson, N. C. (in prep). Predicting daily PTSD symptoms in World Trade Center responders using passively-collected movement data: An idiographic deep learning approach.
- Mackin, D. M., Dorris, H., York, C., **Haddox, D.**, Schleider, J., & Jacobson, N. C. (in prep). Predicting individual response to digital single session interventions for adolescent depression: A secondary analysis using ensemble machine learning models.

#### **CONFERENCE PRESENTATIONS**

- Haddox, D., Mackin, D. M., Heinz, M. V., Nemesure, M. D., Collins, A. C., Price, G. D., Griffin, T. Z., Pillai, A., Nepal, S., Lekkas, D., Campbell, A. T., & Jacobson, N. C. (November, 2024). Assessing the psychometric properties and validity of an ecological momentary assessment version of the PHQ-9 with sliding scales. Poster to be presented at the 58th Annual Convention of the Association for Behavioral and Cognitive Therapies, Philadelphia, PA.
- Price, G. D., Langener, A. M., **Haddox, D.**, Heinz, M. V., Mackin, D. M., Nemesure, M. D., Collins, A. C., Griffin, T. Z., Pillai, A., Nepal, S., Lekkas, D., Campbell, A. T., & Jacobson, N. C. (May, 2024). Predicting Weekly Variability In Depressive Symptoms Using Deep Learning And Passively-Collected Movement Data. Poster presented at the Supporting Health by Technology Conference, Groningen, Netherlands.
- **Haddox, D.**, Aiman, E., Templeton, E., & Wheatley, T. (May, 2024). *Detecting insider language in natural conversation*. Poster presented at the Karen E. Wetterhahn Science Symposium, Hanover, NH.
- **Haddox, D.**, Aiman, E., Templeton, E., & Wheatley, T. (May, 2024). *Detecting insider language in natural conversation*. Poster presented at The Love Consortium's 2024 TLC Love Conference, Chapel Hill, NC.
- Templeton, E., **Haddox, D.**, Aiman, E., Chang, L., & Wheatley, T. (February, 2024). *Conversational launch pads and insider language between strangers and friends*. Poster presented at the Annual meeting of the Society for Personality and Social Psychology, Emotion Preconference, San Diego, CA.
- Price, G. D., Langener, A. M., **Haddox, D.**, Heinz, M. V., Mackin, D. M., Nemesure, M. D., Collins, A. C., Griffin, T. Z., Pillai, A., Nepal, S., Lekkas, D., Campbell, A. T., & Jacobson, N. C. (October, 2023). *Predicting weekly variability in depressive symptoms among individuals diagnosed with Major Depressive Disorder using deep learning and passively gathered movement data*. Poster presented at the Center for Technology and Behavioral Health's Digital Health Summit: Clinically-Validated Digital Therapeutics: Innovations in Scientific Discovery, Clinical Applications, and Global Deployment, Hanover, NH.

#### **CLINICAL EXPERIENCE**

**Hanover Center for Cognitive Behavioral Therapies** 

Jan 2024-Mar 2024

**Position:** Clinical Assistant

Supervisor: Seoka Salstrom, PhD

**Responsibilities:** 

• Composed psychoeducational and neuropsychological evaluation reports with oversight from the clinic's neuropsychological and learning disabilities specialist.

- Conducted literature reviews to help clinical psychologists stay current with emerging treatment modalities and best practices.
- Created an organized database of psychometric tests, diagnostic measures, associated research papers, and guidelines for easy reference.
- Provided technical support by troubleshooting and resolving software and computer problems that clinicians were unable to solve themselves.
- Engaged in mentorship and advice meetings with clinicians from diverse backgrounds, and attended weekly practice and clinical meetings.
- Efficiently managed client communications, resolving issues via email and assisting in-person clients with administrative questions and concerns.
- Performed various administrative duties, including handling billing, creating guides for future employees, managing office supplies and mail, playing with child clients while clinicians met with their parents, and running errands.

#### LEADERSHIP & EXTRACURRICULARS

## **Dartmouth Philosophy Society**

Sep 2021-Present

Vice President

## **Dartmouth Sings A Cappella**

Sep 2021-Present

Event Planner

#### PROFESSIONAL AFFILIATIONS

Association for Behavioral and Cognitive Therapies

2024

#### WORKSHOPS

The Center for Suicide Research and Prevention Webinar

Jun 2024

Shared Reality Virtual Mini-Conference

Feb 2024

#### TECHNICAL SKILLS

Python, R/RStudio, Javascript, HTML, CSS, Java, C, SQL, Unix, Git/GitHub, Excel, Google Sheets, Qualtrics