The Faculty of Medicine of Harvard University Curriculum Vitae

Date Prepared:	3/5/25	3/5/25		
Name:	Amanda C. Coll	lins		
Office Address:		1 Bowdoin Square, Office 614 Boston, MA 02114		
Work Email:	accollins@mgh	.harvard.edu		
Education:				
08/13 - 05/17	BS	Biology	University of Arkansas	
08/17 - 12/19	MS	Clinical Psychology Mentor: E. Samuel Winer, PhD	Mississippi State University	
06/22 - 06/23	Pre-doctoral internship	Clinical Psychology	Dartmouth-Hitchcock Medical Center	
08/17 - 08/23	PhD	Clinical Psychology Mentor: E. Samuel Winer, PhD	Mississippi State University	
Postdoctoral Trai	ining:			
08/23 - 12/24	T32 Postdoctoral Fellow	Science of Co-Occurring Disorders Mentor: Nicholas C. Jacobson, PhD	Dartmouth College	
Faculty Academic	c Appointments:			
01/25 - Present	Member of the Fa	aculty Psychiatry	Harvard Medical School	
Appointments at Hospitals/Affiliated Institutions:				
01/25 - Present	Investigator	Psychiatry	Massachusetts General Hospital	
Major Administr	ative Leadership	Positions:		
Local				

2025-	Director of Digital Phenotyping and	Depression Clinical and Research Program
	Therapeutics Research	Massachusetts General Hospital

Professional Societies:

2018—	Society for a Science of Clinical	Member
	Psychology	

2019—	Association for Behavioral and Cognitive Therapies 2024—	Member Member, Program Committee
2024—	Society for Digital Mental Health	Member
Professional S	Societies:	
2018—	Society for a Science of Clinical Psychology	Member
2019—	Association for Behavioral and Cognitive	Member
	Therapies 2024—	Member, Program Committee
2024—	Society for Digital Mental Health	Member

Editorial Activities:

• Ad hoc Reviewer

Aging and Mental Health **BMC** Medicine **BMC** Psychiatry British Journal of Health Psychology Clinical Psychology Review Cognitive Therapy and Research Communications Psychology Current Psychology Frontiers in Psychology Journal of Affective Disorders Journal of Clinical Psychology Journal of Positive Psychology Journal of Psychopathology and Clinical Science Nature Mental Health Neuropsychiatric Disease and Treatment Personality and Individual Differences Scientific Reports Stress and Health

Honors and Prizes:

2013-2017 Arkansan Non-Resident Tuition Award University of Arkansas

Education

2019, 2021	College of Arts and Sciences Graduate Student Travel Support Award	Mississippi State University	Research
2018, 2019, 2021	Department of Psychology Travel Award	Mississippi State University	Research
2024, 2024	Department of Biomedical Data Science Travel Award	Dartmouth College	Research
2024	Postdoctoral Scholar Professional Development Award	Dartmouth College	Research

Report of Funded Projects

Past

2023-2024 Positive Valence System Dysfunction in Depression and Cannabis Use: A Pilot and Feasibility Study
 National Institute on Drug Abuse P30DA029926
 MPI: Collins/Jacobson
 This study sought to develop a digital therapeutic to treat positive valence systems dysfunction in depression and cannabis use by including persons with lived experiences.

Current

2024-2025 Use of a Generative AI (Gen-AI) Chatbot for Treating Anxiety and Depression Among Persons with Cannabis Use Disorder (CUD)
P30 Pilot Research Grant, National Institute on Drug Abuse MPI: Jacobson/Heinz/Collins; \$20,000
The goal of this study is to work directly with persons of lived experiences (i.e., those who have depression or anxiety with cannabis use disorder) to iteratively refine and apply our generative artificial intelligence app to populations with these co-occurring disorders.

Projects Submitted for Funding

2024-2029 AMP-C: A Digital Therapeutic for Reward Dysfunction in Co-Occurring Depression and Cannabis Use (first submission; Impact Score: 23; Percentile: 8)
 National Institute on Drug Abuse K23 DA062034
 PI; \$836,966
 The goal of this study is to test the preliminary efficacy of AMP-C, compared to an active control group, for positive valence systems dysfunction in persons with clinical depression and cannabis use.

- 2025-2027 Digital Biomarkers of Positive Valence Systems Functioning in a Transdiagnostic Sample National Institute of Mental Health R21 MH141522
 MPI: Jacobson/Collins; \$449,625
 The goal of this study is to evaluate whether passive sensing data can predict rapid changes in PVS functioning over time in a transdiagnostic, clinical sample within and across days using deep learning models and to determine which PVS features predict future changes in weekly psychopathology symptoms.
- 2025-2028 Evaluating the Preliminary Effectiveness of a Generative Artificial Intelligence Chatbot for the Post-Acute Management of Suicide after Discharge from a Psychiatric Inpatient Unit
 National Institute of Mental Health R34 MH141054
 MPI: Jacobson/Collins/Heinz; \$762,115
 The goal of this study is to conduct a conduct a randomized controlled trial with persons discharged from an inpatient psychiatric unit to evaluate the effectiveness of Therabot, compared to a control group, in reducing STBs.
- 2025-2028 Evaluating the Use of a Generative Artificial Intelligence Chatbot to Reduce Suicidal Thoughts and Behaviors During Psychiatric Hospitalization and Post Discharge American Foundation for Suicide Prevention Blue Sky Focus Grant MPI: Jacobson/Collins/Heinz; \$1,338,539
 The goal of this study is to conduct a conduct a randomized controlled trial in an inpatient psychiatric unit to evaluate the efficacy of Therabot, a generative artificial intelligence chatbot, compared to a treatment as usual group to reduce long-term STBs and psychiatric readmission
- 2025-2030 Reward Devaluation as a Precise Predictor of Therapeutic Progress and Outcome National Institute of Mental Health R01 Co-Investigator (MPI: Winer/Mills) The goal of this study is to predict treatment changes in reward devaluation using behavioral tasks while also investigating the idiographic networks of depression and reward devaluation over time.
- 2026-2028 Neural Reward Activity as a Predictor of Treatment Response in Co-Occurring Depression and Cannabis Use
 Brain & Behavior Research Foundation Young Investigator Grant PI; \$69,909
 The goal of this study is to investigate how neural activity during reward-based tasks predict treatment response to persons with co-occurring depression and cannabis use.

Report of Local Teaching and Training

Teaching of Students in Courses:

2020	General Psychology Undergraduate Students	Mississippi State University 3 hours/week for 1 semester
2021, 2022	Abnormal Psychology Undergraduate Students	Mississippi State University 3 hours/week for 1 semester

Clinical Supervisory and Training Responsibilities:

2023-2024	Supervision of pre-doctoral intern	Dartmouth-Hitchcock Medical Center 1 hour/week; 1:1 supervision for 6 months
Research Sup	ervisory and Training Responsibilities:	
2017-2022	Supervision of research assistants (5-6 research assistants per year)	Mississippi State University 1 hour lab meeting/week; 1:1 supervision for ¹ / ₂ hour/week/research assistant
2022—	Supervision of research assistants (3-4 research assistants per year)	Dartmouth College 2 hour lab meeting/month; 1:1 supervision for 1 hour/month/research assistant
2024—	Supervision of research assistants (1 research assistant per year)	Massachusetts General Hospital 1:1 supervision for 1 hour/week/research assistant

Mentored Trainees and Faculty:

2017-2018	Annie Sheffield, MA / Industrial-organizational psychology graduate student, Auburn University Career stage: undergraduate student. Mentoring role: research mentor Accomplishments: first-authored poster presentation
2018-2019	Carson Allen, BS / Associate Director of Ambulatory Operations, University of Mississippi Medical Center Career stage: undergraduate student. Mentoring role: research mentor Accomplishments: recipient of Henry Family Undergraduate Excellence Fund; first- authored poster presentation
2018-2020	McKenzie Fish, BS / Nursing student, Indiana University Health Career stage: undergraduate student. Mentoring role: research mentor Accomplishments: first-authored poster presentation
2018-2020	Isabelle Comfort, MS / Assistant Clinical Supervisor, Bista Career stage: undergraduate student. Mentoring role: research mentor Accomplishments: first-authored poster presentation
2019-2020	Toni Arroyave, MS / Human Resources Specialist, U.S. Department of Veterans Affairs Career stage: undergraduate student. Mentoring role: research mentor Accomplishments: first-authored poster presentation
2019-2022	Colton Watson, BS / Medical student, University of Mississippi Medical Center Career stage: undergraduate student. Mentoring role: research mentor Accomplishments: recipient of Provost Scholar's Independent Research Award; co- authored paper in <i>Journal of Affective Disorders Reports</i> ; three co-authored poster presentations

2020-	Michael Gallagher, MS / Clinical psychology intern, The Ohio State University Wexner Medical Center
	Career stage: graduate student. Mentoring role: research mentor Accomplishments: poster award for best poster at the Clinical Research Methods and Statistics Special Interest Group at the Annual Convention for the Association for Behavioral Cognitive Therapies; four first-authored manuscripts in <i>Journal of Affective</i> <i>Disorders, British Journal of Clinical Psychology, Journal of Behavior Therapy and</i> <i>Experimental Psychiatry,</i> and <i>the Behavior Therapist</i> ; one first-authored symposium presentation; four first-authored poster presentations
2020-2022	Julie Anne Miller, BS / Clinical psychology doctoral student, Sam Houston State University Career stage: undergraduate student. Mentoring role: research mentor Accomplishments: recipient of Shackouls Research Fellowship; two co-authored papers in <i>PLOS ONE</i> and <i>Journal of Affective Disorders Reports</i> ; three first-authored poster presentations; two co-authored poster presentations
2023-2024	Brianna Trudeau, BS / Clinical psychology doctoral student, Eastern Michigan University Career stage: undergraduate student. Mentoring role: research mentor Accomplishments: co-authored paper in <i>Psychiatry Research</i>
2023-2024	Abigail Salzhauer, BS / Clinical psychology doctoral student, Pace University Career stage: undergraduate student. Mentoring role: research mentor Accomplishments: co-authored paper in <i>JMIR Formative Research</i>
2023-2024	Abigail Jewett, BS / Research assistant Career stage: post-baccalaureate researcher. Mentoring role: research mentor Accomplishments: co-authored paper in <i>Psychiatry Research</i>
2023-2024	Victor Moreno / Undergraduate student, Dartmouth College Career stage: undergraduate student. Mentoring role: research mentor Accomplishments: first-authored poster presentation, co-authored paper in <i>Journal of</i> <i>Affective Disorders</i>
2023-2024	Jenny Oh / Undegraduate student, Dartmouth College Career stage: undergraduate student. Mentoring role: research mentor Accomplishments: co-authored papers in <i>JMIR Formative Research</i> and <i>Journal of</i> <i>Affective Disorders</i>
2023-	Dawson Haddox / Undergraduate student, Dartmouth College Career stage: undergraduate student. Mentoring role: research mentor Accomplishments: first-authored poster presentation; co-authored paper in <i>Cognitive</i> <i>Therapy and Research</i>

Report of Regional, National and International Invited Teaching and Presentations

 \boxtimes No presentations below were sponsored by 3^{rd} parties/outside entities

Those presentations below sponsored by outside entities are so noted and the sponsor(s) is (are) identified.

Regional

2017	Uncontrolled eating: A mediating factor between impulse control difficulties and binge eating (oral presentation) Arkansas Symposium for Psychology Students Conway, AR
2018	Is fear of happiness associated with behavioral aversion to reward? Mississippi State University Mississippi State, MS
2019	Do we ever truly know our clients? Mississippi State University Mississippi State, MS
2019	What happens next? A trainee's perspective Mississippi State University Mississippi State, MS
2022	Positive valence system dysfunction as a treatment target in depression Center for Technology and Behavioral Health, Dartmouth College (invited presentation) Lebanon, NH
2023	Reward processing in depression: Evidence of devaluation and implications for treatment (invited presentation) Dartmouth-Hitchcock Medical Center Lebanon, NH
2024	Bridging gaps in intervention design through user-centric feedback: The development of a digital therapeutic to treat reward dysfunction in depression and cannabis use (invited presentation) Dartmouth College Lebanon, NH
2024	Positive valence system dysfunction as a treatment target in depression (invited presentation) Dartmouth College Lebanon, NH
2024	Development of a digital therapeutic alongside persons with lived experiences to treat reward dysfunction in depression and cannabis use (invited presentation) Center for Technology and Behavioral Health, Dartmouth College Lebanon, NH
2024	Digital biomarkers of avoidance and their relationship with depression and anxiety symptoms (invited presentation) The New School for Social Research New York, NY
2024	Use of passively collected actigraphy data to detect individual depressive symptoms in a clinical subpopulation and a general population (symposium talk)

	Anxiety & Depression Association of America Boston, MA
2025	The power of data: Exploring novel frontiers of depression prediction and prevention (invited panelist) National Collegiate Research Conference Boston, MA
National	
2023	Semantic signals in self-reference: The detection and prediction of depressive symptoms from the daily diary entries of a sample with major depressive disorder (symposium talk) Association for Behavioral and Cognitive Therapies Seattle, WA
2023	The role of positive emotions in depression and anxiety: Evidence of positivity avoidance and treatment implications (symposium chaired) Association for Behavioral and Cognitive Therapies Seattle, WA
2023	Predicting changes in self-referential processing after a positive imagery training in a sample with elevated depressive symptoms (invited presentation) University of Texas at Austin Austin, TX
2024	Depressive symptoms as a heterogeneous and constantly evolving dynamical system: Idiographic depressive symptom networks of rapid symptom changes among persons with major depressive disorder (symposium talk) Association for Behavioral and Cognitive Therapies Philadelphia, PA
2025	A multimodal investigation of reward processing as a transdiagnostic mechanism in depression and anxiety (symposium chaired) Association for Psychological Sciences Washington, D.C.
2025	Digital biomarkers of avoidance and their relationship with depression and anxiety symptoms (symposium talk) Association for Psychological Sciences Washington, D.C.
International	
2023	Self-referential processing and depression: A systematic review and meta-analysis International Convention of Psychological Science Brussels, BE
2024	Investigating psychopathology symptoms and positivity appraisals: A network comparison (invited presentation) University of Exeter

Exeter, UK

2024 Development of a digital intervention for positive valence system dysfunction in cooccurring depression and cannabis use College on Problems of Drug Dependence Montreal, CA

Recognition:

2021, 2024	Publicity of 2021 <i>Journal of Clinical</i> <i>Psychology</i> paper on the association between fear of happiness and depression	Psychology Today
2023	Publicity of 2023 <i>Journal of Behavior</i> <i>Therapy and Experimental Psychiatry</i> paper on the inter-relations among avoidance, dampening, and devaluation of reward	Psychology Today, Washington Post, Mississippi State College of Arts & Sciences News Release
2020, 2023	Citation of 2019 <i>Psychology Research</i> <i>and Behavior Management</i> paper on the definition of anhedonia	Verywell Mind
2024	Publicity of 2023 <i>Proceedings of the 2024</i> <i>CHI Conference on Human Factors in</i> <i>Computing Systems</i> paper on detecting depression with AI and facial expressions on the smartphone	Medical News Observer, iHeart, Tech Explorer, and Theravive

Report of Scholarship

ORCiD: 0000-0002-8258-2272

Peer-Reviewed Scholarship in print or other media:

Research Investigations

*indicates co-first authorship **indicates student/trainee

- Winer, E. S., Jordan, D. G., & Collins, A. C. (2019). Conceptualizing anhedonias and implications for depression treatments. *Psychology Research and Behavior Management*, 12, 324-335. doi: 10.2147/PRBM.S159260
- Lass, A. N. S., Winer, E. S., Collins, A. C., & Rokke, P. D. (2020). The associations among distress tolerance, unhelpful coping behaviors, and symptoms of depression: A network analysis. *Cognitive Therapy and Research*, 44(6), 1077-1090. doi: 10.1007/s10608-020-10131-2
- 3. Jordan, D. G., Collins, A. C., Dunaway, M. G., Kilgore, J., & Winer, E. S. (2021). Negative affect interference and fear of happiness are independently associated with depressive symptoms over time.

Journal of Clinical Psychology, 77(3), 646-660. doi: 10.1002/jclp.23066

- 4. Collins, A. C., Lass, A. N. S., Jordan, D. G. & Winer, E. S. (2021). Examining rumination, devaluation of positivity, and depressive symptoms via community-based network analysis. *Journal of Clinical Psychology*, 77(10), 2228-2244. doi: 10.1002/jclp.23158
- 5. **Gallagher, M. R., **Collins, A. C.**, & Winer, E. S. (2022). Quantifying devaluation of positivity via self-report measures: A review and directions for future research. *the Behavior Therapist*. *45*(4), 130-134.
- Bryant, J. S., **Gallagher, M. R., Collins, A. C., & Winer, E. S. (2023). Individuals fearing positivity do not perceive positive affect treatments as strong fits: A novel experimental finding and replication. *Journal of Behavior Therapy and Experimental Psychiatry*. 79, 101830. doi: 10.1016/j.jbtep.2022.101830
- Collins, A. C., Lass, A. N. S., & Winer, E. S. (2023). Negative self-schemas and devaluation of positivity in depressed individuals: A moderated network analysis. *Current Psychology*. 42, 32566– 32575. doi: 10.1007/s12144-023-04262-4
- **Gallagher, M. R., Collins, A. C., & Winer, E. S. (2023). A network analytic investigation of avoidance, dampening, and devaluation of positivity. *Journal of Behavior Therapy and Experimental Psychiatry*, 81, 101870. doi: 10.1016/j.jbtep.2023.101870
- Collins, A. C., Jordan, D. G., Bartoszek, G., Kilgore, J., Lass, A. N. S. & Winer, E. S. (2023). Longitudinal and experimental investigations of implicit happiness and explicit fear of happiness. *Cognition and Emotion*, 37(5), 973-989. doi: 10.1080/02699931.2023.2223907
- *Kilgore, J., *Collins, A. C., **Miller, J. A. M., & Winer, E. S. (2023). Does grit protect against the adverse effects of depression on academic achievement? *PLOS ONE*, 18(7), e0288270. doi: 10.1371/journal.pone.0288270
- Collins, A. C. & Winer, E. S. (2024). Self-referential processing and depression: A systematic review and meta-analysis. *Clinical Psychological Science*, 12(4), 721-750. doi: 10.1177/21677026231190390
- *Pillai, A., *Nepal, S., Wang, W., Nemesure, M. D., Heinz, M. V., Price, G. D., Lekkas, D., Collins, A. C., Griffin, T. Z., Buck, B., Preum, S. M., Cohen, T., Jacobson, N. C., Ben-Zeev, D., & Campbell, A. T. (2024). Investigating generalizability of speech-based suicidal ideation detection using mobile phones. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*, 7(4), 174. doi: 10.1145/3631452
- Price, G. D., Heinz, M. V., Collins, A. C., & Jacobson, N. C. (2024). Detecting major depressive disorder presence and severity using passively-collected wearable movement data in a nationallyrepresentative sample. *Psychiatry Research*, 332, 115693. doi: 10.1016/j.psychres.2023.115693
- 14. Calafiore, C., **Collins, A. C.**, **Miller, J. A. M., **Watson, C., & Winer, E. S. (2024). Examining the unique and interactive impacts of anhedonia and fear of happiness on depressive symptoms. *Journal of Affective Disorders Reports, 15,* 100702. doi: 10.1016/j.jadr.2023.100702
- 15. Collins, A. C., Price, G. D., Woodworth, R. J., & Jacobson, N. C. (2024). Predicting individual response to a web-based positive psychology intervention: A machine learning approach. *The Journal*

of Positive Psychology, 19(4), 675-685. doi: 10.1080/17439760.2023.2254743

- 16. *Nemesure, M. D., *Collins A. C., Price, G. D., Griffin, T. Z., Pillai, A., Nepal, S., Heinz, M. V., Lekkas, D., Campbell, A. T., & Jacobson, N. C. (2024). Depressive symptoms as a heterogeneous and constantly evolving dynamical system: Idiographic depressive symptom networks of rapid symptom changes among persons with major depressive disorder. *Journal of Psychopathology and Clinical Science*, 133(2), 155–166. doi: 10.1037/abn0000884
- *Nepal, S., *Pillai, A., Wang, W., Griffin, T. Z., Collins, A. C., Heinz, M. V., Lekkas, D., Mirjafari, S., Nemesure, M. D., Price, G. D., Jacobson, N. C., & Campbell, A. T. (2024). MoodCapture: Depression detection using in-the-wild smartphone images. *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*. doi: 10.1145/3613904.3642680
- **Gallagher, M. R., Collins, A. C., Goldman, S., & Winer, E. S. (2024). How etiological beliefs contribute to the structure of depression symptom networks. *British Journal of Clinical Psychology*. 63(3), 431-452. doi: 10.1111/bjc.12476
- *Price, G. D., *Collins, A. C., Heinz, M. V., Mackin, D. M., & Jacobson, N. C. (2024). Use of passively collected actigraphy data to detect individual depressive symptoms in a clinical subpopulation and general population. *Journal of Psychopathology and Clinical Science*. doi: 10.1037/abn0000933
- 20. Kline, E. A., Lekkas, D., Bryan, A., Nemesure, M., Griffin, T. Z., Collins, A. C., Price, G. D., Heinz, M. V., Nepal, S., Pillai, A., Campbell, A.T., & Jacobson, N. C. (2024). The role of borderline personality disorder traits in predicting longitudinal variability of major depressive symptoms among a sample of depressed adults. *Journal of Affective Disorders*. 363(15), 492-500. doi: 10.1016/j.jad.2024.07.104
- 21. **Collins, A. C.**, **Bhattacharya, S., **Oh, J. Y., **Salzhauer, A., Taylor, C. T., Wolitzky-Taylor, K., Aupperle, R. L., Budney, A. J., & Jacobson, N. C. (in press). Inclusion of individuals with lived experiences in the development of a digital intervention for co-occurring depression and cannabis use: A mixed-methods investigation. *JMIR Formative Research*.
- 22. Collins, A. C., Lekkas, D., Struble, C. A., **Trudeau, B. M., **Jewett, A. D., Griffin, T. Z., Nemesure, M. D., Price, G. D., Heinz, M. V., Nepal, S., Pillai, A., Mackin, D. M., Campbell, A. T., Budney, A. J., & Jacobson, N. C. (2024). From mood to use: Using ecological momentary assessments to examine how anhedonia and depressed mood impact cannabis use in a depressed sample. *Psychiatry Research. 339*, 116110. doi: 10.1016/j.psychres.2024.116110
- Calafiore, C., Collins, A. C., Bartoszek, G., & Winer, E. S. (2024). Assessing relinquishment of positivity as a central symptom bridging anxiety and depression. *Journal of Affective Disorders*. 367, 38-48. doi: 10.1016/j.jad.2024.08.031
- 24. Collins, A. C., Price, G. D., Dainer-Best, J., **Haddox, D., Beevers, C. G., & Jacobson, N. C. (2024). Changes to positive self-schemas after a positive imagery training are predicted by participant characteristics in a sample with elevated depressive symptoms. *Cognitive Therapy and Research.* doi: 10.1007/s10608-024-10544-3
- 25. **Gallagher, M. R., Collins, A. C., Lekkas, D., Nemesure, M. D., Griffin, T. Z., Price, G. D., Heinz, M. V., Pillai, A., Nepal, S., Mackin, D. M., Campbell, A. T., Winer, E. S., & Jacobson, N. C. (2024). Anhedonia in flux: Understanding the associations of emotion regulation and anxiety with anhedonia

variability in a sample with major depressive disorder. *Journal of Affective Disorders*. doi: 10.1016/j.jad.2024.11.059

- 26. *Collins, A. C., *Price, G. D., **Moreno, V. A., Mackin, D. M., **Oh, J. Y., Heinz, M. V., & Jacobson, N. C. (2025). A comparison of objective and subjective measures of physical activity, sedentary and sleep behaviors between persons with and without depressive symptoms. *Journal of Affective Disorders*. doi: 10.1016/j.jad.2025.01.092
- 27. **Gallagher, M. R., Collins, A. C., Anduze, S. L., & Winer, E. S. (in press). When effort pays off: An experimental investigation into action orientation and anxiety as buffering factors between anhedonia and reward motivation. *PLOS ONE*.
- 28. Collins, A. C., Lekkas, D., Nemesure, M. D., Griffin, T. Z., Price, G. D., Pillai, A., Nepal, S., Heinz, M. V., Campbell, A. T., & Jacobson, N. C. (in press). Semantic signals in self-reference: The detection and prediction of depressive symptoms from the daily diary entries of a sample with major depressive disorder. *Journal of Psychopathology and Clinical Science*.

Thesis:

Collins (2023). Self-referential processing in depression: A systematic review and meta-analysis.

Manuscripts Submitted to Preprint Servers

- 1. Jordan, D. G., Salem, T., Nadorff, M., Gotlib, I. H., **Collins, A. C.**, Lass, A. N. S., Kilgore, J., Dunaway, M. G & Winer, E. S. (2024). Examining the connectivity of anhedonia and reward devaluation in a network of behavioral tasks over time. *PsyArXiv*. doi: 10.31234/osf.io/hacvt
- 2. *Collins, A. C., *Lekkas, D., *Heinz, M. V., **Annor, J., **Ruan, F. Y., & Jacobson, N. C. (2024). ChatGPT as therapy: A qualitative and network-based thematic profiling of shared experiences, attitudes, and beliefs on Reddit. *PsyArXiv*. doi: 10.31219/osf.io/57q8x
- 3. **Haddox, D., Mackin, D., Griffin, T., Heinz, M. V., Nemesure, M. D., Collins, A. C., Price, G., Lekkas, D., Pillai, A., Nepal, S., Campbell, A. T., & Jacobson, N. C. (2024). Psychometric properties and validity of a Mobile Patient Health Questionnaire-9 (MPHQ-9) for ecological momentary assessment in depressed adults. *PsyArXiv*. doi: 10.31234/osf.io/rfvy5

Narrative Report

Introduction

I am the Director of Digital Phenotyping and Therapeutics Research at the Depression Clinical and Research Program at Massachusetts General Hospital, and I am a Member of the Faculty at Harvard Medical School. My research focuses on reward dysfunction as a transdiagnostic mechanism underlying the etiology and maintenance of psychopathology, including depression. I have two sub-areas of research from this core interest: (1) the application of advanced statistical methods to predict changes in psychopathology and (2) the development and testing of both in-person and digital interventions. I bridge these two lines of research to understand *what interventions, focused on reward dysfunction, work best and for whom*.

Area of Excellence: Investigation

Although prior research has emphasized the impact of dysfunction within negative systems, my research has focused on how reward dysfunction can contribute to the development or maintenance of depressive symptoms (Gallagher, Collins, & Winer, 2022). Guided by reward devaluation theory, my research has shown that avoidance and devaluation of reward can longitudinally predict depression (Jordan, Collins, et al., 2021) and elements of reward dysfunction dynamically interact with depressive symptoms in three independent network analyses (Collins et al., 2021; Collins, Lass, & Winer, 2023; Lass et al., 2020). My research has also demonstrated through a series of meta-analyses that there are moderate to large effects in how depressed persons endorse and recall self-referential words, including differences between self- and other-referential positive words (Collins & Winer, 2023). These findings provide evidence that reward dysfunction may emerge when positivity is directed toward themselves *only* as depressed persons did not demonstrate this dysfunction when processing positive words about other persons. I have also investigated whether persons with reward dysfunction would engage in a positive affect treatment, and my findings suggest that these persons explicitly avoid this treatment that would work best for them (Bryant et al., 2022).

I utilize a multimodal approach, including self-reports, experimental paradigms, ecological momentary assessments (EMAs) and passive sensing, to investigate the dynamic and heterogeneous nature of psychopathology. I have extensive experience with longitudinal data analysis, including multilevel and time-varying vector autoregressive modeling, mixed-effects modeling, and machine learning. I have applied these to investigate how depression dynamically changes over time and how other behaviors or psychopathology symptoms impact depression. Moreover, I have a specific interest in understanding how reward dysfunction changes over time and can influence the course, severity, and treatment of psychopathology.

I have also developed a digital intervention, alongside persons with lived experiences, to target anhedonia in co-occurring depression and cannabis use (Collins et al., 2024a). I utilize advanced methods (e.g., machine learning) to predict *who* would benefit the most from a given treatment to triage them and optimize treatment match (Collins et al., 2024b). To date, I have published 28 peer-reviewed publications (13 first-authored), with several in high-impact journals, including *Journal of Psychopathology and Clinical Science* (IF: 7.8) and *Clinical Psychological Science* (IF: 7.2).

Teaching and Mentorship

I am deeply passionate about teaching and providing mentorship. I strive to create inclusive, supportive, and engaging learning environments for all my students and mentees. During my time at Mississippi State University, I was instructor of record for two courses: General Psychology in Fall 2020 and Abnormal Psychology in Fall 2021 and Spring 2022, with overall positive qualitative evaluations and a median rating of 4/4 in each semester. I also have mentored dozens of trainees across Mississippi State University and Dartmouth College, many of whom have been successful in securing post-graduate career plans, including offers to medical school, PhD programs, and master's programs. Moreover, with my support and guidance, several of my mentees have successfully obtained travel awards and research fellowships Lastly, I have worked alongside mentees to help them become first- or co-authors on papers and conference presentations.