

Estephan A. Hakim, Ph.D.

NIMH T32 Postdoctoral Fellow, Medical University of South Carolina
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Research Profile

Quantitative developmental psychologist and NIMH T32 postdoctoral fellow studying how family relationships, communication, and behavioral interventions shape substance-use risk, trauma recovery, and behavioral health across adolescent and emerging adult development. I lead funded research and provide methodological leadership on collaborative NIH-funded projects spanning prevention, intervention, and the delivery of evidence-based care. My distinctive strength is bringing rigorous quantitative thinking to real-world questions and translating the results into clear and useful conclusions for interdisciplinary teams. I have independently taught statistics, research methods, and introductory psychology, including courses enrolling more than 100 students.

Education and Postdoctoral Training

Medical University of South Carolina	2025-Present
NIMH T32 Postdoctoral Training, National Crime Victims Research and Treatment Center	
Department of Psychiatry and Behavioral Sciences	
Training track: Epidemiology, Risk and Prevention. Primary mentor: Michael R. McCart, Ph.D.; secondary mentor: Christine Hahn, Ph.D.	
The University of Alabama	2025
Ph.D., Developmental Psychology	
Minor: Statistics	
Dissertation: <i>A Multidimensional Look at Parent Alcohol-Specific Communication and College Drinking</i>	
The University of Alabama	2021
M.A., Developmental Psychology	
The University of Alabama at Birmingham	2016
B.S., Psychology	

Quantitative Methods and Statistical Software

Psychometrics and structural equation modeling: Confirmatory factor analysis, path and latent variable models, measurement invariance and comparability, item response theory, reliability, and measure development and refinement.

Longitudinal, multilevel models: Longitudinal, repeated-measures and mixed-effects models, generalized estimating equations, and clustered outcomes.

Mixture, mediation, and complex-outcome methods: Latent profile and class analysis, mixture models, BCH distal-outcome methods, moderation, mediation, response surface analysis, count and zero-inflated models, and survival/event-history analysis.

Bayesian, simulation, and incomplete-data methods: Bayesian analysis, Monte Carlo simulation, and missing-data approaches.

Intervention trials, evidence synthesis, and survey methods: Randomized and non-inferiority trials; meta-analysis of efficacy, implementation, and implementability outcomes; survey sampling and weighting.

Software: R, Mplus, SAS, SPSS, Stata, Dedoose, and NVivo.

Grant and Research Support

FUNDED AWARDS: PRINCIPAL INVESTIGATOR / AWARDEE

Society of Behavioral Medicine

2026

Bridging the Gap Research Award | Role: Awardee | \$8,000

Building SOAR-T: Develop a survivor-completed profile of recovery supports and barriers for trauma service navigation. Lead formative domain and item development with trauma professionals, paraprofessional and service-system reviewers, and people with lived experience.

Oregon Social Learning Center

2026

Pilot Grant | Role: Principal Investigator | \$40,000

Parent-Adolescent Alcohol and Marijuana Communication: Lead a nationwide longitudinal study of parents of adolescents ages 15-18, including linked adolescent reports, and validate parallel 29-item Alcohol-Specific and Marijuana-Specific Communication measures. Use CFA and IRT to establish factor structure, cross-substance comparability, item performance, and short-form tradeoffs; test reporter correspondence, change over time, and prospective substance-use risk.

Center for Substance Use Research and Related Conditions, University of Alabama

2024

Dissertation Grant | Role: Principal Investigator | \$5,000

Alcohol-specific communication and college drinking risk.

FUNDED PROJECTS: STATISTICAL AND METHODOLOGICAL ROLES

Experimental Mediation Research Aimed at Enhancing Adolescent Substance Abuse Treatment

NIH/NIDA R01DA043578 | Role: Statistical and Methodological Consultant | Project PI: Michael R. McCart |

Total award: \$3,376,502

Lead experimental mediation analyses testing parenting practices as mechanisms of change in adolescent substance-use outcomes and drive manuscript development and revision.

Leveraging Evidence to Activate Parents (LEAP)

NIH/NIDA R01DA050669 | Role: Statistical and Methodological Consultant | Project PI: Michael R. McCart |

Total award: \$3,509,137

Validation of a performance and fidelity coding blueprint for juvenile probation officer training in Parent Activation.

PROPOSALS IN DEVELOPMENT

NIH/NIDA K01 Career Development Award proposal

Role: Principal Investigator | Status: In development. Develop and evaluate a parent-facing digital practice intervention that helps parents tailor the content and timing of alcohol- and cannabis-related messages across high school and the transition to college. Training integrates family-centered intervention development, human-centered digital design, and prevention-trial methods.

NIH/NIDA UG3/UH3 research proposal

Role: Quantitative Methodologist | Status: In development. Develop the statistical and methodological design for a non-inferiority trial evaluating remotely delivered contingency management administered by paraprofessionals.

Peer-Reviewed Publications and Book Chapters

Hakim, E. A., McDonald, K. L., Lochman, J. E., Powell, N. P., & Vernberg, E. M. (2025). Disaster exposure and temperament as predictors of adolescent substance use. *Journal of Clinical Child & Adolescent Psychology*, 54(4), 416–428. <https://doi.org/10.1080/15374416.2022.2124514>

- Hakim, E. A.,** McDonald, K. L., Lochman, J. E., Powell, N. P., Witte, T. H., & Vernberg, E. M. (2024). Youth aggression and peer victimization as predictors of adolescent alcohol and marijuana use: A longitudinal analysis of youth with aggressive behavior problems. *Research on Child and Adolescent Psychopathology*, 52(6), 877–889. <https://doi.org/10.1007/s10802-024-01166-0>
- McDonald, K. L., Dirks, M. A., Dunfield, K. A., & **Hakim, E. A.** (2023). Prosocial behavior, peer relationships, and friendships. In T. Malti & M. Davidov (Eds.), *The Cambridge handbook of prosociality: Development, mechanisms, promotion* (pp. 409–426). Cambridge University Press. <https://doi.org/10.1017/9781108876681.023>
- Lochman, J. E., Boxmeyer, C. L., Bui, C., **Hakim, E. A.**, Jones, S., Kassing, F., McDonald, K. L., Powell, N., Qu, L., & Dishion, T. (2021). Substance use outcomes from two formats of a cognitive-behavioral intervention for aggressive children: Moderating roles of inhibitory control and intervention engagement. *Brain Sciences*, 11(7), 950. <https://doi.org/10.3390/brainsci11070950>

Manuscripts Under Review

- Hakim, E. A.,** & McDonald, K. L. A multidimensional look at parent alcohol-specific communication and college drinking. *Journal of Research on Adolescence*.
- Hakim, E. A.,** & McDonald, K. L. Messages in context: Alcohol-specific communication profiles and college drinking risk. *Journal of Youth and Adolescence*.

Manuscripts in Preparation

- Hakim, E. A.,** & **McCart, M. R.** Refining and validating measures of parental alcohol and marijuana communication.
- Hakim, E. A.,** & Hahn, C. Preliminary efficacy of Skills Training and Exposure for PTSD and Substance Misuse (STEPS): An integrated telehealth intervention for co-occurring PTSD and alcohol misuse.
- Hakim, E. A.,** Haussman, J., & McDonald, K. L. Gender differences in adverse childhood experiences and drinking behavior in early adulthood: The moderating role of friendship quality.
- Hakim, E. A.,** & McDonald, K. L. Relationships with fathers and intimacy within college male same-sex friendships: The mediating role of masculinity.

Current Research in Progress

- Task-Shifting Behavioral Health Meta-Analysis:** Conduct an evidence synthesis integrating efficacy, implementation, and implementability outcomes across task-shifted behavioral health interventions.

Teaching and Mentoring

University of Alabama

PY 355 - Experimental Psychology	2023-2025
PY 211 - Elementary Statistical Methods	2022-2024
PY 101 - Introduction to Psychology	2021-2022
PY 356 - Experimental Psychology Research Laboratory	2019-2022
Independently taught statistics, research methods, experimental psychology, laboratory research, and introductory psychology in classes of more than 100 students. Used active learning and applied assignments to make complex statistical and methodological concepts clear, memorable, and consequential.	

- Summer Research Program | HBCU Undergraduate Student Mentor** 2023
- Mentored undergraduates in research methods, professional development, and research career planning.

Presentations

- Hakim, E. A., & McDonald, K. L.** (2024). *Male gender norms and friendships: The moderating role of relationships with fathers* [Symposium]. Society for Research on Adolescence Annual Meeting. (Chicago, IL)
- Hakim, E. A., McDonald, K. L., Lochman, J. E., Powell, N., & Vernberg, E.** (2023). *Aggressive youth and alcohol use: The moderating effects of peer victimization* [Poster presentation]. Society for Research on Adolescence Annual Meeting. (San Diego, CA)
- Hakim, E. A., McDonald, K. L., Lochman, J. E., Powell, N., & Vernberg, E.** (2022). *Peer victimization and aggression as predictors of substance use initiation in an at-risk sample of youth. Antecedents and consequences of aggression for at-risk youth: The protective roles of morality and classroom tolerance* [Symposium]. International Society for the Study of Behavioural Development Biennial Meeting. (Rhodes, Greece)
- Hakim, E. A., McDonald, K. L., Lochman, J. E., Powell, N., & Vernberg, E.** (2022). *Pre-disaster temperament and tornado exposure as predictors of alcohol use initiation* [Poster presentation]. Society for Research on Adolescence Annual Meeting. (New Orleans, LA)
- Carter, C., **Hakim, E. A., & Saez, M.** (2017, October). How does workplace conflict influence voluntary turnover and lost cases? *Emerging practices in applied behavior analysis* [Symposium]. California Association for Behavior Analysis Conference. (Santa Clara, CA)
- Hakim, E. A., Henry, M. A., & Mrug, S.** (2016, April). *Aggression types as predictors of adolescent substance use* [Poster presentation]. Ost Research Competition. (Birmingham, AL)
- Hakim, E. A., Henry, M. A., & Mrug, S.** (2016, July). *Body image and self-esteem as predictors of adolescent aggression* [Poster presentation]. University of Alabama at Birmingham EXPO. (Birmingham, AL)

Behavioral Health and Trauma Service Experience

- Medical University of South Carolina, Charleston, SC | Non-Clinical Practitioner** 2026-Present
Apply Skills for Psychological Recovery, including problem-solving, behavioral activation, emotion regulation, and social-support strategies, with people exposed to acute trauma.
- Healthy Living Drug and Alcohol Detox/Rehab Center, Santa Clarita, CA | Detox Technician** 2017-2018
Provided direct care during medical detoxification; completed intake and risk assessments and supported stabilization and treatment engagement.
- Beacon Addiction Treatment Center, Birmingham, AL | Co-Counselor** 2016
Supported adolescent outpatient substance-use treatment through intake, risk assessment, relapse-prevention, and treatment-planning activities.
- Thinking for a Change Cognitive Skills Group, Birmingham, AL | Group Facilitator** 2016
Facilitated structured cognitive-behavioral groups for youth focused on decision-making, problem-solving, behavioral regulation, and social-emotional skills.

Fellowships

- MUSC: NIMH T32 Postdoctoral Fellowship (T32 MH18869-38)** 2025-Present
- University of Alabama: National Alumni Association Fellowship** 2019–2020 and 2021–2025

Departmental Leadership and Service

University of Alabama

- Climate Committee Member (2023-2024). Oversaw components of the departmental climate reporting system and responses to graduate-student concerns.
- PGSA DEI Representative (2023). Led a graduate climate survey, organized outreach and town halls, and helped develop a BIPOC high-school sponsorship program and an international-student representative position.

Diversity Committee Graduate Student Liaison (2022-2024). Connected graduate students and faculty to advance departmental initiatives and communication.

DEI Student Training Committee Member and Resource Coordinator (2020-2021). Coordinated expert-led workshops and developed resources supporting clinical and research training.

Professional Review Service

Reviewer: Addiction (2025); Aggressive Behavior (2024); Society for Research on Child Development (2021-2024).

Additional Research and Travel Support

University of Alabama Research and Travel Grants | \$5,000 cumulative | 2021-2025

Bezos Family Foundation Travel Grant | \$1,000 | 2022

Capstone International Center International Travel Funding | \$1,000 | 2022

University of Alabama Assure Research Funding | \$850 | 2021

Selected Professional Training

Scale Development and Validation in R (Hudson Golino, Ph.D.).

Skills for Psychological Recovery (SPR), trauma-focused recovery skills training (2025).

Monitoring the Future Workshop, nationally representative substance-use data, survey sampling, and weighting.

Advanced R Workshop Series; SAS Global Forum (2022-2025).

Event History and Survival Analysis Workshop, longitudinal event data.

Additional training: NIH HEAL; APA multilevel models; NAADAC trauma-informed care; SAMHSA serious mental illness and youth cannabis; NCSACW cross-system family-centered practice; MUSC Psychiatry Grand Rounds.

Languages

Fluent in English and Arabic