

BIOGRAPHICAL SKETCH

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NAME: McHugh, Rebecca Kathryn

eRA COMMONS USER NAME (credential, e.g., agency login): MCHUGH.REBECCA

POSITION TITLE: Assistant Professor of Psychology

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Harvard University, Cambridge, MA	B.A.	06/2003	Psychology
Boston University, Boston, MA	M.A.	05/2006	Clinical Psychology
Brown University Medical School, Providence, RI	Internship	06/2011	Clinical Psychology
Boston University, Boston, MA	Ph.D.	01/2012	Clinical Psychology

A. Personal Statement

I am a licensed clinical psychologist in the Division of Alcohol and Drug Abuse at McLean Hospital and an Assistant Professor at Harvard Medical School. My research focuses on two complementary lines of inquiry: (1) the intersection of emotion and emotional amplification with addictive behaviors, and (2) behavioral therapies for anxiety and substance use disorders. I have successfully recruited participants across a range of settings including methadone maintenance treatment facilities, inpatient detoxification facilities, outpatient services, and general medical settings. I also have a strong track record in retaining participants with opioid use disorder in longitudinal studies, including an ongoing NIDA-funded Career Development Award. I have published over 100 manuscripts, book chapters, and an edited book and have received several research awards, including the David Shakow Early Career Award for Distinguished Scientific Contributions to Clinical Psychology.

B. Positions and Honors**Positions and Employment**

08/2011-02/2013 Instructor in Psychology, Department of Psychiatry, Harvard Medical School, Boston, MA.
 08/2011-02/2013 Assistant in Psychology, McLean Hospital, Belmont, MA.
 02/2013-07/2013 Associate in Psychology, McLean Hospital, Belmont, MA.
 03/2013- Assistant Professor of Psychology, Department of Psychiatry, Harvard Medical School, Boston, MA.
 07/2013- Associate Psychologist, Division of Alcohol and Drug Abuse, McLean Hospital.

Other Experience and Professional Memberships

2006- Member, American Psychological Association
 2006- Member, Division 12, American Psychological Association
 2006- Member, Association for Behavioral and Cognitive Therapies
 2012- Editorial Board, *Cognitive Therapy and Research*
 2013- Member, College of Problems on Drug Dependence
 2013- Licensed Psychologist, Commonwealth of Massachusetts
 2014- Editorial Board, *Behavior Therapy*
 2016- Editorial Board, *Cognitive and Behavioral Practice*
 2017 Ad Hoc Reviewer, NIH Special Emphasis Panel (ZDA1HXO-H)

2017- Program Committee Chair, Division 12, American Psychological Association
2017- Associate Editor, *Behavior Therapy*
2017- Co-Chair, Task Force on Clinical Responses to the Opioid Crisis, Division 12, APA
2018 Reviewer, NIH Interventions to Prevent and Treat Addictions Study Section

Honors

2008 NIDA CPDD Women and Sex/Gender Junior Investigator Travel Award
2009 Clara Mayo Memorial Fellowship, Boston University
2009 Assembly of Scientist/Practitioner Psychologists Learning APA Governance Award, American Psychological Association
2009 Dissertation Research Award, American Psychological Association
2010 Distinguished Student Research Award in Clinical Psychology, Division 12, American Psychological Association
2011 Early Career Investigator Travel Award, College of Problems on Drug Dependence
2012 Kavita Jain Dissertation Award, Department of Psychology, Boston University
2014 Women and Sex/Gender Differences Junior Investigator Travel Award, NIDA/College of Problems on Drug Dependence
2015 Chairman's Choice Travel Award, Society of Biological Psychiatry
2015 David Shakow Early Career Award for Distinguished Scientific Contributions to Clinical Psychology, Division 12, American Psychological Association
2015 Alfred Pope Award for Young Investigators, McLean Hospital
2018 Theodore Blau Early Career Award for Outstanding Contribution to Professional Clinical Psychology

C. Contribution to Science

1. Distress Intolerance and Affective Vulnerability. In the early part of my career, my primary scientific contributions were in the area of emotional vulnerability factors that are applicable across an array of psychiatric diagnoses, with a particular focus on distress intolerance. Distress intolerance is a key concept in numerous models of psychopathology and a key purported mechanism of change in behavioral therapies. In a series of studies including multi-modal measurement I demonstrated that distress intolerance is a heterogeneous construct that varies based on the type of distress, a finding that has significant implications for the understanding of this construct, and helps to explain inconsistent findings in prior studies. I have also developed and validated two measures of distress intolerance, including a self-report scale and a novel application of the willingness-to-pay paradigm. Much of my work in distress intolerance has focused on the area of opioid misuse.

- a. Kahler, C.W., McHugh, R.K., Metrik, J., Spillane, N.S., & Rohsenow, D.J. (2013). Breath holding duration and self-reported smoking abstinence intolerance as predictors of smoking lapse behavior in a lab analogue task. *Nicotine Tob Res*, 15:1151-1154. PMID: 3646647.
- b. McHugh, R.K., Kertz, S.J., Weiss, R.B., Baskin-Sommers, A.R., Hearon, B.A., & Björgvinsson, T. (2014). Changes in distress intolerance and treatment outcome in a partial hospital setting. *Behav Ther*, 45:232-240. PMID: 4191891.
- c. McHugh, R.K., & Otto, M.W. (2011). Domain-general and domain-specific strategies for the assessment of distress intolerance. *Psychol Addict Behav*, 25:745-749. PMID: 3232280.
- d. McHugh, R.K., & Otto, M.W. (2012). Profiles of distress intolerance in a substance-dependent sample. *Am J Drug Alcohol Abuse*, 38:161-165.

2. Opioid Use Disorder. More recently, my research has increasingly focused on opioid misuse across the spectrum of severity, ranging from misuse of opioids in chronic pain patients to severe opioid dependence in adults receiving treatment. In this area, I expanded my early work on distress intolerance in heroin-dependent adults to prescription opioids in both chronic pain and addiction treatment settings. I received a BSTART Award from NIDA investigating distress intolerance and pain tolerance as predictors of medication abuse in chronic pain patients receiving long-term opioids for chronic pain. This study found a robust association

between distress intolerance and opioid misuse. Another area of focus has been on differences between heroin and prescription opioids, an area in which I have published papers on cue reactivity, impulsivity and perceptions of drug risk.

- a. Karakula, S.L., Weiss, R.D., Griffin, M.L., Borges, A.M., Bailey, A.J., & McHugh, R.K. (2016). Delay discounting in opioid use disorder: Differences between heroin and prescription opioid users. *Drug Alc Depend*, 169:68-72.
- b. McHugh, R. K., Park, S., & Weiss, R. D. (2014). Cue-induced craving in dependence upon prescription opioids and heroin. *Am J Addict*, 23:453-458.
- c. McHugh, R.K., Weiss, R.D., Cornelius, M., Martel, M.O., Jamison, R.N., & Edwards, R.R. (2016). Distress intolerance and prescription opioid misuse among patients with chronic pain. *J Pain*, 17, 806-814.
- d. Votaw, V.R., Wittenauer, J., Connery, H.S., Weiss, R.D., & McHugh, R.K. (2017). Perceived risk of heroin use among nonmedical prescription opioid users. *Addict Behav*, 65, 218-233.

3. Dissemination and Implementation. Another area of my research focus is the dissemination and implementation of behavioral therapies for psychiatric illnesses. My work in this area has spanned a wide array of research questions united by the theme of understanding and improving access to evidence-based psychotherapies. For example, I have published work on the readability of symptom scales, treatment cost-efficacy, the use of technology to deliver behavioral therapies, patient perceptions of treatments, and efforts to enhance access to therapies, among others. Based on this program of research, I have published 20 papers, 6 book chapters, and a first-authored co-edited book.

- a. McHugh, R.K., & Barlow, D.H. (2010). The dissemination and implementation of evidence-based psychological interventions: A review of current efforts. *Am Psychol*, 65:73-84.
- b. McHugh, R.K., & Behar, E. (2009). Readability of self-report measures of depression and anxiety. *J Consult Clin Psychol*, 77:1000-1012.
- c. McHugh, R.K., Otto, M.W., Barlow, D.H., Gorman, J.M., Shear, M.K., & Woods, S.W. (2007). Cost-efficacy of individual and combined treatments for panic disorder. *J Clin Psychiatry*, 68:1038-1044.
- d. McHugh, R.K., Whitton, S.W., Peckham, A.D., Welge, J.A., & Otto, M.W. (2013). Patient preference for psychological vs. pharmacological treatment of psychiatric disorders: A meta-analytic review. *J Clin Psychiatry*, 74, 595-602. PMID: 4156137.

4. Anxiety and Substance Use Disorder Co-Occurrence. Most recently, I have begun to merge my interests in the anxiety disorders and substance use disorders to conduct research on their co-occurrence. These disorders commonly co-occur and confer worse prognosis and greater symptom severity, yet, much remains to be understood about their co-occurrence and treatment. My work in this area has included both studies designed to understand the nature of the co-occurrence (e.g., anxiety as a risk factor for benzodiazepine abuse in patients with opioid use disorder), and optimal treatment strategies. I am currently conducting a randomized controlled trial of a novel cognitive-behavioral therapy for co-occurring anxiety disorders and opioid use disorder, as part of a K23 Award from NIDA.

- a. McHugh, R.K., Votaw, V.R., Bogunovic, O., Karakula, S.L., Griffin, M.L., & Weiss, R.D. (2017). Anxiety sensitivity and nonmedical benzodiazepine use among adults with opioid use disorder. *Addict Behav*, 65:283-288.
- b. McHugh, R.K. (2015). Treatment of co-occurring anxiety disorders and substance use disorders. *Harv Rev Psychiatry*, 23:99-111. PMID: 4355945.

- c. McHugh, R.K., Greenfield, S.F., Barlow, D.H., Carroll, K.M., & Weiss, R.D. Cognitive behavioral therapy for anxiety and opioid use disorders, Clinician Manual (version 1.2). Unpublished manual.
- d. Otto, M.W., McHugh, R.K., Simon, N.M., Farach, F.J., Worthington, J.J., & Pollack, M.H. (2010). Efficacy of CBT for benzodiazepine discontinuation in patients with panic disorder: Further evaluation. *Behav Res Ther*, 48:720-727.

Complete List of Published Work in MyBibliography:

<https://www.ncbi.nlm.nih.gov/sites/myncbi/rebecca.mchugh.1/bibliography/40345934/public/?sort=date&direction=descending>

D. Research Support

Ongoing Research Support

- | | |
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| <p>K23 DA035297 McHugh (PI)
NIDA
Behavioral Treatment Development for Opioid Dependence and Anxiety
Goal - to develop and test a novel behavioral treatment for co-occurring opioid dependence and clinical anxiety.
Role: PI</p> | <p>4/1/14-3/31/19</p> |
| <p>K23 DA035297-04S1 McHugh (PI)
NIDA
Gender Differences in Mechanisms of Recovery from Opioid Use Disorder and Anxiety - Supplement
Goal - to examine the role of negative reinforcement bias and its modulation by ovarian sex hormones in women with co-occurring opioid use disorder and clinical anxiety.
Role: PI</p> | <p>4/1/17-3/31/18</p> |
| <p>R34 MH113600 Beard (PI)
NIMH
Augmenting Hospitalization for SMI by Targeting Interpretation Bias
The major goals of this project are to refine and test a computer-based intervention for reducing maladaptive cognitive bias in adults with psychiatric disorders during the transition out of hospitalization.
Role: Co-Investigator</p> | <p>5/1/18-4/30/21</p> |
| <p>R21 DA046937 McHugh (PI)
Behavioral Strategies to Reduce Stress Reactivity in Opioid Use Disorder
The aim of this project is to test the efficacy of two behavioral strategies for modifying response to behavioral and physiological response to stress in adults with opioid use disorder.
Role: PI</p> | <p>9/1/18-8/31/20</p> |

Completed Research Support

None in the past 3 years.