

Colin M. Bosma

University of Maine
Department of Psychology
Orono, ME 04469

Phone: (303) 884-4514
E-mail: colin.bosma@maine.edu
Website: cmbosma.github.io

EDUCATION

The University of Maine
PhD Candidate, Clinical Psychology (APA accredited)
Advisor: Emily A.P. Haigh, PhD

Orono, ME
expected Spring 2020

University of Colorado Boulder
BA, *cum laude*, Psychology
Advisor: Sona Dimidjian, PhD

Boulder, CO
Spring 2012

PEER-REVIEWED PUBLICATIONS

Bosma, C. M., Mansoor, N., & Haller, C. S. (2018). Evolution of health-related quality of life associated with post-traumatic stress across 12 months after severe traumatic brain injury. *Archives of Physical Medicine and Rehabilitation*. DOI: 10.1016/j.apmr.2018.02.008

Haller, C. S., **Bosma, C. M.**, Kapur, K., Zafonte, R., & Langer, E. J. (2017). Mindful creativity matters: trajectories of reported functioning after severe traumatic brain injury as a function of mindful creativity in patients' relatives: a multilevel analysis. *Quality of life research*, 26(4), 893-902. DOI: 10.1007/s11136-016-1416-1

Pagnini, F., Phillips, D., **Bosma, C. M.**, Reece, A., & Langer, E.J. (2016). Mindfulness as a protective factor against the burden of caregivers of people with amyotrophic lateral sclerosis. *Journal of Clinical Psychology*, 72(1), 101-111. DOI: 10.1002/jclp.22235.

Pagnini, F., Phillips, D., **Bosma, C. M.**, Reece, A., & Langer, E. (2015). Mindfulness, physical impairment and psychological well-being in people with amyotrophic lateral sclerosis. *Psychology & Health*, 30(5), 503-517. DOI: 10.1080/08870446.2014.982652.

Pagnini, F., **Bosma, C. M.**, Phillips, D., & Langer, E. (2014). Symptom changes in multiple sclerosis following psychological interventions: a systematic review. *BMC Neurology*, 14(1), 222. DOI: 10.1186/s12883-014-0222-z.

INVITED BOOK CHAPTERS

Haigh, A. P., & **Bosma, C. M.** (in review). Langer Mindfulness/Mindlessness Scale. In O. N. Medvedev, C. U. Kraigeloh, R. J. Seigert, & N. N. Singh (Eds.), *Handbook of Assessment in Mindfulness*. New York, NY: Springer

Gragnano, G., **Bosma, C. M.**, & Pagnini, F. (2015). Clinical psychology and spirituality. In D. S. Stoyanov & D. Stieglitz (Eds.), *New Developments in Clinical Psychology Research*. Hauppauge, NY: Nova Science Publishers

ORAL PRESENTATIONS

- Bosma, C. M.**, Haigh, E. A. P., Raugh, I. M., Delcourt, M., Moore, M. T., & Lau, M. A. (2017, November). *The Relationship between cognitive and mood reactivity and relapse to depression following mindfulness-based cognitive therapy*. Symposium presentation given at the Association for Behavioral and Cognitive Therapies Annual Convention, San Diego, CA.
- Bosma, C. M.** & Haller, C.S. (2017, August). *Trajectories of reported functioning after severe traumatic brain injury as a function of mindful creativity*. Talk given at the American Psychological Association Annual Convention. Washington, DC.
- Bosma, C. M.**, Pagnini, F., Phillips, D., Reece, A., & Langer, E. (2015, March). *Mindfulness as a protective factor against the burden of caregivers of people with amyotrophic lateral sclerosis*. Talk given at The Asian Conference on Psychology and Behavioral Sciences. Osaka, Japan.
- Bosma, C. M.**, & Haller, C. S. (2014, August). *The influence of mindfulness and creativity on the recovery process of patients suffering from severe TBI*. Talk given at the American Psychological Association Annual Convention. Washington, DC.
- Pagnini, F., Phillips, D., **Bosma, C. M.**, Reece, A., & Langer, E. (2014, August). *Mindfulness and physical impairment in people with amyotrophic lateral sclerosis*. Talk given at the American Psychological Association Annual Convention. Washington, DC.
- Pagnini, F., Phillips, D., **Bosma, C. M.**, Reece, A., & Langer, E. (2014, August). *Mind and body in severe chronic disorders: a mindfulness perspective*. Talk given at the American Psychological Association Annual Convention. Washington, DC.
- Bosma, C. M.**, & Haller, C. S. (2014, February). *The influence of mindfulness and creativity on the recovery process of patients suffering from severe TBI*. Talk given at the 4th Mind-Body Interface International Symposium. Taichung, Taiwan.
- Bosma, C. M.**, Hubley, S., Dimidjian, S. (2013, April). *Adherence scale development for mindfulness-based cognitive therapy for the prevention of postpartum depression*. Paper presented at the Rocky Mountain Psychological Association 2012 Convention. Reno, NV.

POSTER PRESENTATIONS

- Bogucki, O. E., **Bosma, C. M.**, LiaBraaten, L., & Haigh, E. A. P. (2018, November). *Does high-frequency heart rate variability/respiratory sinus arrhythmia predict cognitive or mood reactivity to sadness in formerly depressed individuals? Findings from the Maine Mood Disorders Lab*. Poster submitted to the Association for Behavioral and Cognitive Therapies Annual Convention. Washington, DC.
- Bosma, C. M.**, Haigh, E. A. P. (2018, October). *Respiratory sinus arrhythmia and affect regulation among formerly depressed individuals*. Poster submitted to the Society of Psychophysiological Research 58th Annual Meeting. Quebec City, Quebec, Canada.
- Bosma, C. M.**, Bogucki, O. E., & Haigh, E. A. P. (2018, April). *Mood and physiological reactivity to sadness among individuals with a history of depression*. Poster presented at the Society of Affective Science Annual Convention. Los Angeles, CA.

- Bosma, C. M.**, Raugh, I. M., Delcourt, M., Haigh, E. A. P., & Lau, M. A. (2017, November). *Evaluation of LEIDS-RR measure of cognitive reactivity as a predictor of depressive symptoms and risk of relapse*. Poster presented at the Association for Behavioral and Cognitive Therapies Annual Convention. San Diego, CA.
- Raugh, I. M., **Bosma C. M.**, Haigh, E.A.P., Moore, M.T., & Lau, M.A. (2017, April). *Evaluation of LEIDS-RR measure of cognitive reactivity as a predictor of depressive symptoms and risk of relapse*. Poster presented at the University of Maine Center for Undergraduate Research Symposium. Bangor, ME.
- Bosma, C. M.**, Raugh, I., Quiñones, R., Haigh, E. A. P., Moore, M. T., & Lau, M. A. (2016, October). *Mood reactivity predicts relapse and depressive symptom change following mindfulness-based cognitive therapy*. Poster presented at the Association for Behavioral and Cognitive Therapies Annual Convention. New York City, NY.
- Bosma, C. M.**, Haigh, E. A. P, Moore, M. T., & Lau, M. A. (2016, August). *How does mindfulness-based cognitive therapy impact risk for depression? Using multilevel modeling to examine treatment-related changes in cognitive reactivity*. Poster presented at the American Psychological Association Annual Convention. Denver, CO.
- Bosma, C. M.**, Pagnini, F., Phillips, D., Reece, A., Langer, E. (2016, April). *Mindfulness as a protective factor against the burden of caregivers of amyotrophic lateral sclerosis patients*. Poster presented at the University of Maine Center for Student Research Symposium. Bangor, ME.
- Bosma, C. M.**, Pagnini, F., Phillips, D., Reece, A., Langer, E. (2015, June). *Mindfulness as a protective factor against the burden of caregivers of people with amyotrophic lateral sclerosis*. Poster presented at the Mind and Life Summer Research Institute. Garrison, NY.
- Fremont, E. R., **Bosma, C. M.**, Rood D., Langer, E. (2014, August). *The Effect of Mindfulness on Sensory Discriminatory Capabilities*. Poster presented at the American Psychological Association Annual Convention. Washington, DC.
- Bosma, C. M.**, Haller, C. S. (2014, March). *The influence of mindfulness and creativity on the recovery process of patients suffering from severe TBI*. Poster presented at the Harvard Medical School Research Day and Mysell Lecture. Boston, MA.

INVITED TALKS

- Bosma, C. M.** (2015, October) Alumnus Guest Speaker. Night on Ned fundraising event. TEENS, Inc. Nederland, CO.

RESEARCH EXPERIENCE

- The University of Maine**, Department of Psychology
Graduate Research Assistant to Emily A.P. Haigh, PhD
- Orono, ME
2015-Present
- Project titles: 1) “Investigating the Role of Attention and Elaboration in Relapse to Depression”; 2) “Evaluating Cognitive Reactivity as a Causal Risk Factor of Depressive Relapse”
 - Conduct ongoing literature reviews on psychophysiological correlates of depression and anxiety.
 - Participate in the discussion of research articles.
 - Contribute to writing laboratory manuals.

- Recruit and train research assistants.
- Mentor research assistants on honors thesis projects.
- Conduct structured clinical interviews (SCID).
- Conduct analyses for a randomized control trial of Mindfulness-Based Cognitive Therapy versus Relaxation training, code therapy sessions for adherence, and coordinate meetings.
- Conduct trainings in psychophysiological collection and analytic equipment (Mindware and BioLab).
- Oversee data management.
- *Psychophysiological Testing*: Acquired measurement of Heart Rate (HR), Interbeat Interval (IBI), Respiration Rate, Respiratory Sinus Arrhythmia (RSA) Skin Conductance Level (SCL), Skin Conductance Response (SCR), Left Ventricle Ejection Time (LVET), Pre Ejection Period (PEP), Cardiac Output (CO), Stroke Volume (SV).
- Manuscript preparation.

Harvard Medical School, Department of Psychiatry

Boston, MA

Research Collaborator to Chiara S. Haller, PhD

2013-2017

- Project titles: 1) “The Influence of Mindful-creativity of Relatives on the Recovery Process of Patients Suffering from Severe TBI”; 2) “Validation of the Haller Mindful-Creativity Scale”
- *Description*: Project 1 evaluated patient and proxy mindful-creativity using the short version of the Mindfulness-Creativity Scale (MCS-s) and patient recovery from severe TBI using the Patient Competency Rating Scale for Neuro-Rehabilitation (PCRS-NR). Scores were compared at three different time points over the course of a year with relevant covariates to determine the influence of patient and proxy mindful-creativity on patient recovery from severe TBI over time.
- Statistical Analysis: Multilevel modeling and descriptive analyses of longitudinal, clinical data using R and SPSS.
- Manuscript Preparation: Creating figures for interactions and multivariate analyses using R. Writing, creating tables, and formatting for publication.
- Conduct systematic reviews, literature searches and organize references using scholarly sources. Scale development.

Harvard University, Department of Psychology

Cambridge, MA

Senior Research Assistant to Ellen Langer, PhD

2012-2015

- Project titles: 1) “Personal Control Over Multiple Sclerosis: An online mindfulness program”; 2) “Mind and Body: Mindfulness and physical impairment in people with amyotrophic lateral sclerosis”
- Research Coordination: General training and supervision of research assistants on running experiment tasks.
- Research design, recruitment, testing, data management, and writing lab protocols.
- Data analysis and visualization using R and SPSS.
- Prepare, edit, and review IRB proposals.
- Conduct literature searches and organize references using scholarly sources.
- Manuscript preparation, review, and submission.
- Website development and maintenance.

Yale University, Department of Psychology

New Haven, CT

Lab Manager to June Gruber, PhD

2012

- Project titles: 1) “An Affective Neuroscience Approach to Reward Processing and Emotion Regulation in Bipolar Disorder and Major Depression”; 2) “Positive Emotion Processes, Mood and Anxiety”

- Lab Management: Developed and updated lab protocols describing lab procedures for participant interaction, data collection and analysis, lab safety, and lab expectations. Acted as administrative liaison for the psychology department.
- Research Coordination: Coordinated all recruitment, preparation, scheduling, and implementation of study procedures. Led testing of clinical populations (i.e., Bipolar 1, Major Depression) in 16 separate research tasks. Responsible for data management including database organization, data backup, and data reports. Responsible for all participant payment and documenting the lab budget.
- Training and Research Assistant Management: Responsible for training and directly supervising 9 undergraduate research assistants.
- Psychophysiological Testing: Acquired measurement of Heart Rate (HR), Interbeat Interval (IBI), Respiration Rate, Respiratory Sinus Arrhythmia (RSA) Skin Conductance Level (SCL), Skin Conductance Response (SCR), Left Ventricle Ejection Time (LVET), Pre Ejection Period (PEP), Cardiac Output (CO), Stroke Volume (SV), Skin Temperature, Finger Pulse Transit Time (FPTT), and Finger Pulse Amplitude (FPA). Explained measurements to participants, made appropriate adjustments to maintain good measurement signals during collection.
- Administered and scored current symptoms measures: Inventory of Depressive Symptomatology (IDS-C), Young Mania Rating Scale (YRMS), Bech-Rafaelsen Mania Scale (BRMS).
- Performed reliability ratings on DSM-IV, CSR, GAF, and current mood state measures for lab research projects.
- Administered and scored neuropsychological testing: Wechsler Adult Intelligence Scale-IV (WAIS-IV) Letter Number Sequencing subtest, Mini Mental Status Exam (MMSE).
- Performed clinical phone interviews reviewing Axis 1 disorders to screen potential participants for eligibility in lab research projects. Reviewed finished phone screens conducted by other research assistants to determine potential participant eligibility.
- Trained research assistants on lab protocols concerning participant interaction.
- Administered and scored abbreviated current symptom measures based on the YRMS, BRMS, and IDS-C to determine immediate eligibility before experiment participation.

University of Colorado Boulder, Department of Psychology and Neuroscience Boulder, CO
Honors Thesis Student to Sona Dimidjian, PhD 2011-2012

- Project title: "Feasibility of Disseminating Mindfulness-Based Cognitive Therapy"
- Description: This project adapted and evaluated psychometric properties of the original Mindfulness-Based Cognitive Therapy (MBCT) adherence scale for measuring treatment fidelity in MBCT sessions with women who are at risk for postpartum depression and compared treatment fidelity between expert clinicians and novice clinicians.
- Contributed to research design, adapting the adherence scale, and rating trial therapy sessions. Created project-training guidelines, trained collaborating researcher to adequately use the adherence scale, conducted statistical analyses, prepared the manuscript, and defended thesis.
- Conducted literature searches and organized references using scholarly sources.

Undergraduate Research Assistant to Sona Dimidjian, PhD 2008-2012

- Project title: "Investigation of Causally Active Strategies of Behavioral Activation for Depression"
- Transcribed videotaped trial Behavioral Activation therapy sessions for rater reliability ratings and coding for therapist adherence to the Behavioral Activation protocol.
- Checked data sets of participant self-report measures for accuracy.
- Performed extensive literature searches, organized references for lab manuscripts and became proficient in using Endnote, SPSS, and R.

CLINICAL EXPERIENCE

Psychological Services Center, The University of Maine
Clinician Orono, ME
2016-Present

- Supervisors: Asia Serwik, PhD, Rebecca Schwartz-Mette, PhD, Emily Haigh, PhD, Elizabeth Cuddy, PhD
- Provide psychological evaluations and treatment
- Perform learning disability assessments.

School System Services, Regional School Unit 68
School Assessment Consultant Dover-Foxcroft, ME
2016-2018

- Supervisor: Elizabeth Cuddy, PhD
- Conducted cognitive and achievement assessments of children and adolescents referred for special education recommendations through formal assessment reports. Determined eligibility for special education services. Completed 7 assessment cases. 5 integrated reports and 2 WIAT-III.

Bay Cove Human Service Inc., Boston Medical Center
Mental Health Worker Boston, MA
Winter 2013-Summer 2015

Boulder County Department of Housing and Human Services
Mentor Boulder, CO
2012

Halcyon Middle High School Day Treatment
Volunteer Boulder, CO
2012

Counseling and Psychological Services, University of Colorado Boulder
Volunteer Coordinator/Peer Educator Boulder, CO
2008-2012

TEACHING AND ADVISING EXPERIENCE

The University of Maine, Department of Psychology
Instructor, Psychology course "PSY 245 Principles of Psychology Research" Orono, ME
2018

The University of Maine, Department of Psychology
Instructor, Psychology course "PSY 212 Abnormal Psychology" Orono, ME
2017

Academic Advisor, College of Liberal Arts and Sciences 2016-Present

- Provide academic advising to undergraduate students majoring in psychology

Teaching Assistant, Psychology course "Principles in Psychology Research" 2015-2017

University of Colorado Boulder, Buff Tutors
Statistic Tutor Boulder, CO
2010-2011

GRANTS AND FELLOWSHIPS

University of Maine Graduate Student Government Summer Research Fellowship (\$5000)	2018
University of Maine Graduate Student Government Degree Related Grant (\$425)	2018
University of Maine Graduate Student Government Degree Related Grant (\$850)	2017
University of Maine Graduate Student Government Degree Related Grant (\$432)	2017
APAGS/Psi Chi Junior Scientist Fellowship (\$1000)	2016

National Science Foundation (NSF) Graduate Research Fellowship Program (unfunded)	2016
University of Maine Graduate Student Government Individual Travel Grant (\$282)	2016
University of Maine Graduate Student Government Individual Travel Grant (\$313)	2016
University of Maine Graduate Student Government Degree Related Grant (\$432)	2015
National Science Foundation (NSF) Graduate Research Fellowship Program (unfunded)	2015
<i>Research Fellow</i> , Mind and Life Research Institute	2015
National Science Foundation (NSF) Graduate Research Fellowship Program (unfunded)	2014

PROFESSIONAL AFFILIATIONS AND MEMBERSHIPS

Society for Affective Science (SAS)	2017-Present
Maine Association of Psychology	2017-Present
Society for a Science of Clinical Psychology (SSCP)	2015-Present
Association for Behavioral and Cognitive Therapies (ABCT)	2015-Present
American Psychological Association (APA)	2014-2017
Association for Psychological Science (APS)	2013-2015
Psi Chi The International Honors Society in Psychology	2011-Present

EDITORIAL EXPERIENCE

Journal of Rational-Emotive & Cognitive-Behavior Therapy <i>Ad-hoc Reviewer</i>	2017
Mindfulness <i>Reviewer</i>	2015-Present
Journal of Rational-Emotive & Cognitive-Behavior Therapy <i>Supervised Review</i>	2017
Personality and Social Psychology Bulletin <i>Ad-hoc Reviewer</i>	2017
Frontiers in Psychology <i>Reviewer</i>	2013-2017
Journal of Health Psychology, BMC Psychology, Psychological Assessment <i>Ad-hoc Reviewer</i>	2014

SERVICE ACTIVITIES

Sigma Phi Epsilon , The University of Maine Chapter <i>Resident Scholar</i>	Orono, ME 2017-Present
<ul style="list-style-type: none"> - Assist new members in their acclimation to college life. - Help older members prepare both personally and professionally for life after college. - Work collaboratively with the chapter's faculty to aid in the academic and developmental programming for all members. - Work one-on-one with members who may be struggling academically. 	
The University of Maine , Department of Psychology <i>Diversity Committee, Member</i>	Orono, ME 2016-Present

- Contribute to planning lecture series, continuing education workshops, and summits on issues of diversity in clinical practice and higher education.

The University of Maine, Department of Psychology

Orono, ME

Clinical Psychology Student Representative

2016-2017

- Serve as student liaison at clinical faculty meetings. Coordinate meetings with clinical graduate students. Coordinate hosting and activities for applicant interviews. Assist in publishing annual clinical alumni newsletter.

MENTORSHIP

The University of Maine, Department of Psychology

Orono, ME

Mentor to Ian Raugh

2016-2017

Yale University, Department of Psychology

New Haven, CT

Mentor to John Purcell

2012

TECHNICAL SKILLS

Statistical Analysis

- Strong foundation in applied Frequentist and Bayesian statistics.
- Familiar with multilevel modeling, causal modeling, meta-analysis, MCMC and bootstrapping, multidimensional scaling, machine learning, social network analysis, web-scraping, text analysis, item-response theory, and data visualization.

Programming Languages

- R, R Markdown, SPSS Syntax, Git, Command Line, Jekyll, Markdown

Psychophysiology

- Experience in collecting electrocardiogram, impedance cardiography, electrodermal activity, and non-invasive blood pressure using BIOPAC MP150 and Mindware 8-slot Bionet data acquisition systems.

Software/Web Applications

- R Studio, SPSS, Shiny, Jupyter, Mechanical Turk, Qualtrics, E-Prime 2.0, Github, Bitbucket, Endnote, Vim, Pro Tools

STATISTICAL ANALYSIS TRAINING

Harvard University, The Graduate School of Arts and Sciences

Cambridge, MA

- "PSYC 1950: Intermediate Statistical Analysis in Psychology" 2014
- "PSYC 3490: Advanced Statistical Modeling and Psychometrics Using R" 2014
- "Regression Models" workshop 2013
- "R Programming" workshop 2013