

Lizbeth ‘Libby’ Benson

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Data Science for Dynamic Intervention Decision Making Center (d3c)
Survey Research Center, Institute for Social Research, University of Michigan
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EDUCATION

- 2021 **PhD** Human Development and Family Studies, Pennsylvania State University
*Quantitative Psychology and Lifespan Development Areas of Emphasis
Dissertation title: Affect and physical activity dynamics in daily life and development across the adult life span.
Nilam Ram, PhD; Zita Oravecz, PhD; Timothy Brick, PhD; David Conroy, PhD
- 2016 **MS** Human Development and Family Studies, Pennsylvania State University
Master’s thesis title: Fusing biodiversity metrics into investigations of daily life and healthy aging: Illustrations and recommendations with emodiversity.
Nilam Ram, PhD and David Almeida, PhD
- 2011 **BA** with honors in Psychology, University of Wisconsin-Madison
Senior honors thesis title: Six- and 14-month infants’ ability to differentiate dialects in their native language.
Jenny Saffran, PhD, Kristin Shutts, PhD, and Jan Edwards, PhD

RESEARCH AND PROFESSIONAL EXPERIENCE

- 2023, Fall **Research Assistant Professor**, Data Science for Dynamic Intervention Decision-Making Center, Survey Research Center, Institute for Social Research, University of Michigan
- 2021-2023 **Postdoctoral Research Fellow**, TSET Health Promotion Research Center, Stephenson Cancer Center, University of Oklahoma Health Sciences Center
Michael Businelle, PhD
- 2014-2021 **Graduate Research Assistant**, Pennsylvania State University
- Dynamics and Development of Self-Regulation
Nilam Ram, PhD; Pamela Cole, PhD
 - Intraindividual Study of Affect, Health, and Interpersonal Behavior
Nilam Ram, PhD; David Conroy, PhD; Aaron Pincus, PhD
 - Wear-IT project, Zita Oravecz, PhD; Timothy Brick, PhD
 - Cognitive and Mobile Phenotyping Neurolab, Jon Hakun, PhD
- 2011-2014 **Research Coordinator**, Positive Psychology Center, University of Pennsylvania
Martin Seligman, PhD; Laurence Steinberg, PhD; Margaret Kern, PhD
- RWJF Positive Health and Positive Health Army grants
 - John Templeton Foundation grant on Positive Neuroscience
- 2008-2011 **Undergraduate Research Assistant**
- Infant Learning Lab, Jenny Saffran, PhD
 - Adolescent Development Lab, Janet Shibley Hyde, PhD

PUBLICATIONS

* indicates author is a mentee/student/trainee

30. *De La Torre, I., Hébert, E. T., Kezbers, K. M., Walters, D., Pope, Z. C., Mao, B., ... & Businelle, M. S. (in press). Associations between cannabis use and same-day health and substance use behaviors. *Addictive Behaviors*, 108239.
29. Hakun, J. G., **Benson, L.**, Qiu, T., Katz, M., Shaw, P., Sliwinski, M. J., Mossavar-Rahmani, Y. (2024). Cognitive health benefits of everyday physical activity in a diverse sample of middle-aged adults. *Annals of Behavioral Medicine*, 59(1), kaae059
28. Businelle, M. S., Hébert, E. T., Shi, D., **Benson, L.**, Kezbers, K., Tonkin, S., Piper, M. E., Qian, T. (2024). Investigating best practices for ecological momentary assessment: Nationwide factorial experiment. *JMIR*, 26, e50275.
27. Businelle, M. S., **Benson, L.**, Hébert, E. T., Neil, J., Kendzor, D. E., Frank-Pearce, S., Kezbers, K. M., Vidrine, D., & Gaur, A. (2024). Project Phoenix: Pilot randomized controlled trial of a smartphone-delivered intervention for people who are not ready to quit smoking. *Drug and Alcohol Dependence*.
26. *Ulm, C., Chen, S., Fleshman, B., **Benson, L.**, Kendzor, D. E., Frank-Pearce, S., Neil, J. M., Vidrine, D., & Businelle, M. S. (2024). Smartphone-based survey and message compliance in adults initially unready to quit smoking: A secondary analysis of a randomized trial. *JMIR Formative Research*.
25. **Benson, L.**, Chen, M., *De La Torre, I., Hébert, E. T., Alexander, A., Ra, C. K., Kendzor, D. E., Businelle, M., S. (2024). Associations between morning affect and later-day smoking urges and behavior. *Psychology of Addictive Behaviors*.
24. **Benson, L.**, Fleming, A. R., Hakun, J., G. (2023). Sometimes you just can't: Within-person variation in working memory capacity moderates negative affect reactivity to stressor exposures. *Cognition and Emotion*, 37(8), 1357-1367.
23. Sifat, M. S., Hébert, E. T., Ahluwalia, J. S., Businelle, M. S., Waring, J. J. C., Frank-Pearce, S., Bryer, C., **Benson, L.**, Madison, S., Planas, L. G., Baranskaya, I., Kendzor, D. (2023). Varenicline combined with oral nicotine replacement therapy and smartphone-based medication reminders for smoking cessation: A pilot study and Feasibility Study. *JMIR Formative Research*, 7(1), e48857.
22. Gilchrist, J. D., Gohari, M. R., **Benson, L.**, Patte, K. A., & Leatherdale, S. T. (2023). Reciprocal associations between positive emotions and resilience predict flourishing among adolescents. *Health Promotion and Chronic Disease Prevention in Canada*.
21. Heshmati, S., Sbarra, D., **Benson, L.** (2023). Integrating multiple time-scales to advance relationship science. Editorial for Special Issue on Integrating Multiple Time-Scales to Advance Relationship Science. *Journal of Social and Personal Relationships*.
20. Felt, J. M., Harrington, K. D., Ram, N., O'Donnell, K. J., Sliwinski, M. J., **Benson, L.**, Putnam, F. W., Noll, J. G., & Shenk, C. E. (2022). Receptive language abilities for females exposed to childhood sexual abuse: Modification by epigenetic age acceleration at midlife in a 30-year prospective cohort study. *Journal of Gerontology: Psychological Sciences*.

19. **Benson, L.**, Ra, C. K. K., Hébert, E. T., Kendzor, D. E., Oliver, J. A., Frank-Pearce, S. G., Neil, J. M., & Businelle, M., S. (2022). Quit stage and intervention type differences in the momentary within-person association between negative affect and smoking urges. *Frontiers in Digital Health*, 41.
18. Shenk, C., Felt, J., Ram, N., O'Donnell, K., Sliwinski, M., Pokhvisneva, I., **Benson, L.**, Meaney, M., Putnam, F., & Noll, J. (2022). Cortisol trajectories measured prospectively across thirty years of female development following exposure to childhood sexual abuse: Moderation by epigenetic age acceleration at midlife. *Psychoneuroendocrinology*, 136, 105606.
17. Geiger, N., Swim, J. K., & **Benson, L.** (2021). Using the three-pillar model of sustainability to understand lay reactions to climate policy: A multilevel approach. *Environmental Science & Policy*, 126, 132–141.
16. Van Doren, N., Dickens, C., **Benson, L.**, Brick, T. R., & Oravec, Z (2021). Capturing emotion coherence in daily life: using ambulatory physiological measures and ecological momentary assessments to examine within-person associations and individual differences. *Biological Psychology*, 162, 108074.
15. Kerr, M. L., Rasmussen, H. F., Smiley, P. A., Fanning, K. A., Buttitta, K. V., **Benson, L.**, & Borelli, J. L. (2021). Within- and between-family differences in mothers' guilt and shame: Caregiving, coparenting, and attachment. *Journal of Family Psychology*, 35(3), 265-275.
14. Gatzke-Kopp, L., **Benson, L.**, Ryan, P., Ram, N. (2020). Cortical and affective regulation of autonomic coordination. *Psychophysiology*, 57(5), e13544.
13. **Benson, L.**, English, T., Conroy, D. E., Pincus, A. L., Gerstorf, D., & Ram, N. (2019). Age differences in emotion regulation strategy use, variability, and flexibility: An experience sampling approach. *Developmental Psychology, Special Issue on New Perspectives on the Development of Emotion*, 55(9), 1951-1964.
12. Ramsook, S., **Benson, L.**, Ram, N., Cole, P. (2019). Age-related changes in the relation between preschoolers' anger and persistence. *International Journal of Behavioral Development*, 44(3), 216-225.
11. Loughheed, J. P., **Benson, L.**, Cole, P., Ram, N. (2019). Multilevel survival analysis: Studying the timing of children's recurring behaviors. *Developmental Psychology*, 55(1), 53-65.
10. Forgeard, M.J.C., & **Benson, L.** (2019). Extracurricular involvement and psychological adjustment in the transition from adolescence to emerging adulthood: The role of mastery and creative self-efficacy. *Applied Developmental Science*, 23(1), 41-58.
9. **Benson, L.**, Ram, N., Stifter, C. (2018). Using fishery models to examine self- and co-regulation processes across multiple timescales. *Structural Equation Modeling: A Multidisciplinary Journal*, 25(6), 906-923.
8. **Benson, L.**, Ram, N. (2018). Biodiversity metrics in lifespan developmental methodology. In *Oxford Research Encyclopedia of Psychology*. Oxford University Press.
7. **Benson, L.**, Ram, N., Almeida, D. M., Zautra, A. J., & Ong, A. D. (2018). Fusing biodiversity metrics into investigations of daily life: Illustrations and recommendations with emodiversity. *The Journals of Gerontology: Series B*, 73(1), 75–86.

6. Ong, A. D., **Benson, L.**, Zautra, A. J., Ram, N. (2018). Emodiversity and biomarkers of inflammation. *Emotion, 18*(1), 3–14.
5. Wood, J., Oravec, Z., Vogel, N., **Benson, L.**, Chow, S. M., Cole, P., ... & Ram, N. (2018) Modeling Intraindividual Dynamics Using Stochastic Differential Equations: Age Differences in Affect Regulation. *The Journals of Gerontology: Series B, 73*(1), 171–184.
4. Roepke, A.M., **Benson, L.**, Tsukayama, E., Yaden, D. B. (2018). Prospective writing: Randomized controlled trial of an intervention for facilitating growth after adversity. *Journal of Positive Psychology, 13*(6), 627-642.
3. Ram, N., **Benson, L.**, Brick, T.R., Conroy, D.E., Pincus, A.L. (2017). Behavioral landscapes and Earth Mover’s Distance: A new approach for studying individual differences in density distributions. *Journal of Research in Personality, 69*, 191-205.
2. Kern, M.L., **Benson, L.**, Larson, E., Bevans, K., Forrest, C., & Steinberg, L. (2016). The anatomy of developmental predictors of healthy lives study (TADPOHLS). *Applied Developmental Science, 20*(2), 135–145.
1. Kern, M.L., **Benson, L.**, Steinberg, L., & Steinberg, E. (2016). The EPOCH measure of adolescent well-being. *Psychological Assessment, 28*(5), 586-597.

Manuscripts Under Review:

* indicates author is a mentee/student/trainee

Benson, L., Hébert, E. T., Sperry, S. H., Dempsey, W., Kendzor, D. E., Businelle, M. S., & Ram, N. (revise and resubmit, invited manuscript under review at Advances in Methods and Practices in Psychological Science). Time-related considerations for modeling event-based data collected via ecological momentary assessment.

Turkelson, A., Ng, Y.T., Garabedian, R., Gonzalez, R. **Benson, L.**, & Birditt, K.S. (under review). Your Heart Beats Next To Mine: Daily Physiological Influence Among Black And White ADRD Caregiver-Care Recipient Dyads.

Shao, R., Neil, J. M., Chen, M., Hannafon, B., Nipp, R., Montgomery, A., Frank-Pearce, S., Moxley, K., Richardson, D., Elliott, J., **Benson, L.**, Businelle, M. (under review). Feasibility, acceptability, and utility of a symptom monitoring app for patients undergoing active cancer treatment during the COVID-19 pandemic.

Sifat, M. S., Boozary, L. K., Le, T. N., McQuoid, J., Zaring-Hinkle, B., Tonkin, S., **Benson, L.**, Mao, B., Ogunsanya, M., Shao, R., Cohn, A., Kendzor, D. (under review). Post-Roe v. Wade stress is associated with mental health problems: Quantitative and qualitative findings from Oklahoma in 2022.

Tornello, S., Riskind, R., **Benson, L.** (under review). Parenting stress, not parent gender identity, linked to adjustment among children with nonbinary and binary transgender parents.

*Zhang, S., Dziak, J. J., **Benson, L.**, Yap, J. R. T., Jones, D. R., Lam, C. Y., Potter, L. N., Wetter, D. W., Nahum-Shani, I. (revise and resubmit). Missing data in microrandomized trials: Challenges and opportunities.

GRANTS

Funded

- 2025-2026 **d3c Pilot Project**, NIH P50 DA054039
MPIs: Lizbeth Benson and Mark Newman
\$15,000
Title: Personalized feedback visualizations for just-in-time adaptive interventions
- 2025 **University of Michigan Network for Innovative Methods in Longitudinal Aging Studies (NIMLAS) Pilot Project**
MPIs: Crystal Ng and Kira Birditt; Co-Investigators: Noelle Carlozzi, Sung Choi
Role: Co-Investigator
\$30,000
Title: Positive activities and well-being among dementia care dyads: A pilot test of a scalable positive activity mHealth app
- 2024-2025 **University of Michigan Center on the Demography of Aging (MiCDA) Innovation Pilot Project** (NIH P30 AG012846)
MPIs Kira Birditt, Noelle Carlozzi, Sung Choi
Role: Co-Investigator
\$20,000
Title: Positive Activities in the Roadmap App
- 2021 **Insight Development Grant** funded by the Social Sciences and Humanities Research Council, Canada.
PI: Jenna Gilchrist. Affective adaptation during the transition to university: A dynamical systems approach
Role: Collaborator
Title: Well-Being among upper school students at Ridley College.
- 2015 **CTSI Community Engagement Enhancement Grant**
PI: Nilam Ram
Co-Investigators: Pamela Cole, Lizbeth Benson, Timothy Brick, David Conroy, Julian Thayer, Robyn Schulkowsky, Joey Baron
\$5,000
Title: See, hear, & feel your health: Engagement through visual, sonic, and haptic representations of personalized data streams.

Under Review

- 2025 (June) NIH R01
MPIs: Kira Birditt, Noelle Carlozzi, Sung Choi
Role: Co-Investigator
Title: Positive activities and daily well-being among ADRD care dyads: A novel examination of scalable positive activity mHealth App
- 2025 (April) Eisenberg Family Depression Center Impact Grant Letter of Intent
MPIs: Lizbeth Benson and Sarah Sperry
Title: Patient- and provider-informed visualizations of mood instability: A personalized approach to bipolar disorder care
- 2025 (March) NIH K01
PI: Lizbeth Benson

Title: Personalized feedback visualizations for smoking cessation just-in-time adaptive interventions

2025 (Feb)

NIH R34

MPIs: Deborah Thompson and Erica Soltero

Role: Co-Investigator

Title: Feasibility of optimizing an adaptive goal setting intervention for adolescents with overweight using a sequential multiple assignment randomized trial

2024 (Dec)

NIH F32

PI: Allyson Tabaczynski

Role: Mentor

Title: Preparing to optimize a multimodal adaptive intervention for physical activity behavior change among middle age and older adults

Unfunded

2025

NIH R01 (Score: 35, Percentile: 21st)

MPIs: Michael Businelle, Emily Hébert

Role: Co-Investigator

Title: Optimizing smoking cessation outcomes: A SMART approach to adaptive interventions

2024

NIH K01

PI: Lizbeth Benson

Title: Personalized reflective visualizations for smoking cessation just-in-time adaptive interventions

2024

NIH R01

MPIs Kira Birditt, Noelle Carlozzi, Sung Choi

Role: Co-Investigator

Title: Positive activities and daily mental health among ADRD caregivers: A within person test of a scalable positive activity MHealth app

2023

NIH R01

PI: Jordan Neil

Role: Co-Investigator

Title: Symptom tracker: A novel mHealth intervention to improve symptom management among rural patients undergoing active cancer treatment

2019

John Templeton Foundation Grant

PI: Saeideh Heshmati

Role: Co-Investigator

Title: A within-person approach to momentary love: Examining dynamic characteristics and processes using intraindividual variability in positivity resonance.

2019

Social Sciences and Humanities Research Council, Canada.

PI: Jenna Gilchrist

Role: Co-Investigator

Title: Broadening the emotional landscape among adolescents enrolled in sport

2025

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FELLOWSHIPS, AWARDS, HONORS

- 2025 Annelise Madison, Muneesh Tewari, Lizbeth Benson, Erin Sandford
John A. Swets Memorial Award for Excellence in Collaborative Research in
Psychological Science, University of Michigan
- 2024 Invited participant for the Mobile Health Training Institute 2024 Cohort
- 2023 Travel Award Recipient: *Daily social support and pressure to quit are associated
with time to recurring smoking lapses* [Program Chair's Choice Paper
Presentation]. Collaborative Perspectives on Addiction Annual Meeting,
\$500
- 2022 Poster Award: *Quit stage and intervention type differences in the momentary
within-person association between negative affect and smoking urges*, Annual
Cancer Research Symposium, Stephenson Cancer Center
\$100
- 2019 Hintz Fellowship for Dissertation Research, the Pennsylvania State University
\$6,000
- 2018 Innovative Research on Aging Award Recipient, Mather LifeWays Institute on
Aging
\$1,000
- 2016 National Science Foundation, Graduate Research Fellowship Honorable Mention
- 2015 Pennsylvania State University, College of Health and Human Development
Professional Development Endowment Award
\$500
- 2015 National Science Foundation, Graduate Research Fellowship Honorable Mention
- 2014-2015 University Graduate Fellowship, the Pennsylvania State University
\$25,701/year
- 2014 NSF Graduate Research Fellowship Course, the Pennsylvania State University
\$2,000
- 2014 Ford Endowment Award, the Pennsylvania State University
\$2,000
- 2013 Honorable Mention Poster Award, 25th APS Annual Convention
- 2010 Trewartha Honors Senior Thesis Grant, University of Wisconsin Madison
\$1,000
- 2009-2011 Dean's List, University of Wisconsin Madison
- 2009-2011 Psi Chi National Honors Society

PRESENTATIONS

* indicates first author is a mentee/student/trainee

Invited Talks

2025

Lizbeth 'Libby' Benson, PhD 7

Benson, L. (2024, November). *Safety considerations in mHealth Technology Research* [Invited Talk and Panel Discussion]. Mobile Technologies Research Innovation Collaborative (MeTRIC) Annual Symposium, University of Michigan, Ann Arbor, MI.

Benson, L. (2024, October). *Preparation phase research for optimizing a just-in-time adaptive intervention for smoking cessation* [Invited Talk]. Society for Behavioral Medicine Digital Health Special Interest Group.

Benson, L. (2024, September). *Optimizing a just-in-time adaptive intervention for smoking cessation* [Invited Talk]. Centre for Digital Health Interventions, ETH Zurich, University of Zurich, University of St. Gallen, Switzerland.

Benson, L. (2024, January). *Developing and testing mHealth just-in-time personalized data visualizations for smoking cessation* [Invited Talk]. Statistical Reinforcement Learning Lab, Harvard University.

Benson, L. (2023, October). *Time-related considerations for modeling event-based ecological momentary assessment data* [Invited Talk]. Psychology Methods Hour, University of Michigan, Ann Arbor, MI.

Benson, L., Frank-Pearce, S.G., Hébert, E. T., Kendzor, D. E., Businelle, M. (2023, May). *Time-related considerations for modeling event-based data collected via ecological momentary assessment and wearable devices* [Invited Talk]. Association for Psychological Science Annual Convention. Washington DC.

Benson, L. (2022, April). *Not all “effects” are modeled equally: Re-focusing the spotlight onto random effects* [Invited Talk]. Michigan State University HDFS Methods and Statistics Discussion Group, East Lansing, MI.

Chaired Symposia

Benson, L. (December, 2024). *Innovations in just-in-time adaptive interventions for mental health.* [Symposium Chair]. Technology in Psychiatry Summit, Phoenix, AZ.

Benson, L. (December, 2024). *Conceptual foundations, key components, and new methods for personalizing just-in-time adaptive interventions.* [Symposium Presenter]. Technology in Psychiatry Summit, Phoenix, AZ.

Benson, L., English, T., Conroy, D. E., Pincus, A. L., Gerstorf, D., & Ram, N. (2019, May). *Emotion experience and regulation in context: Stressors, social partners, and age* [Symposium Chair and Presenter]. Association for Psychological Science Conference, Washington DC.

Benson, L., Ram, N., & Stifter, C. (2017, May). *Capturing developmental change in self- and co-regulation processes using dynamic systems models: Borrowing differential equations from ecology* [Symposium Chair and Presenter]. Modern Modeling Methods Conference, Storrs, CT.

Oral Presentations

Benson, L., Sperry, S., H., Dempsey, W., Hébert, E., Kendzor, D., & Businelle, M., S. (2024, June). *Opportunities and Challenges in Applying Multilevel Recurring Event Survival Models to Event-Based Data Collected via Ecological Momentary Assessment.* Individual

Paper Presentation at the 2024 Society for Ambulatory Assessment Conference, Ann Arbor, MI.

Zhang, S., **Benson, L.**, Yap, J., Potter, L. N., Lam, C. Y., Wetter, D. W., Jones, D. R., Nahum-Shani, I. (2024, June). *Missing Data in Microrandomized Trials: Challenges and Opportunities*. Paper Presentation at the 2024 Society for Ambulatory Assessment Conference, Ann Arbor, MI.

Hakun, J.G., Elbich, D.B., Alwerdt, J.U., **Benson, L.**, & Fleming, A.R. (2023). *Age-variant Patters of Within-Person Variation in Self-regulatory Capacity Revealed via Ambulatory Assessments*. Symposium Presentation at the 2023 Meeting of the Gerontological Society of America.

Mao, B., **Benson, L.**, Koslovsky, M., Hébert, E., Frank-Pearce, S., Boozary, L., Wetter, D., Kendzor, D. & Businelle, M. (2023, September). *Dynamic relations between current smoking triggers and imminent smoking among socioeconomically disadvantaged adults: A time-varying effect model*. [Oral Presentation]. Society for Research on Nicotine and Tobacco, Europe Meeting, London, United Kingdom.

Benson, L., Hébert, E. T., Montgomery, A., Stanley, N., Kendzor, D. E., Wetter, D. W., & Businelle, M. S. (2023, March). *Daily social support and pressure to quit are associated with time to recurring smoking lapses* [Program Chair's Choice Paper Presentation, Travel Award Recipient]. Collaborative Perspectives on Addiction Annual Meeting, Albuquerque, NM.

Felt, J. M., Harrington, K. D., Ram, N., O'Donnell, K. J., Sliwinski, M. J., **Benson, L.**, Putnam, F. W., Noll, J. G., & Shenk, C. E. (2023, April). *Receptive language abilities for females exposed to childhood sexual abuse: Modification by epigenetic age acceleration at midlife in a 30-year prospective cohort study* [Paper Presentation]. Society for Behavioral Medicine. Phoenix, AZ.

Businelle, M. S., Hébert, E. T., **Benson, L.**, Neil, J., Kendzor, D. E., Frank-Pearce, S., Ra, K., & Kezbers, K. (2022, May). Project Phoenix: *Pilot Intervention for Smokers Who Are Not Ready to Quit Smoking* [Symposium Presentation]. Association for Psychological Science Annual Convention. Chicago, IL.

Felt, J.M, Harrington, K.D., Ram, N., O'Donnell, K., Sliwinski, M., **Benson, L.**, Putnam, F., Noll, J., & Shenk, C.E. (2022, April). *Epigenetic Age Acceleration at Midlife is Sensitive to Changes in Cortisol Trajectories Across Thirty Years of Female Development Following Child Sexual Abuse* [Oral Presentation]. Society for Behavioral Medicine. Baltimore, MD.

Van Doren, N., Dickens, C., **Benson, L.**, Brick, T.R., Gatzke-Kopp, L., Oravec, Z. (April, 2022). Capturing emotion coherence in daily life: Using ambulatory physiology measures and ecological momentary assessments to examine within-person associations and individual differences. In N. Van Doren (Chair), *The adaptive value of emotion coherence: Examining individual differences and risks for psychopathology* [Symposium Talk]. Society for Affective Science Annual Conference. Virtual.

Benson, L., Ram, N., Conroy, D Oravec, Z., Brick, T., Almeida, D. (2021, November). *Methodological considerations for studying associations between affective experiences and physical activity in daily life and across the life span* [Symposium Presentation]. Gerontological Society of America Annual Scientific Meeting, online.

- Lee, S. A., **Benson, L.**, O'Brien, E., Conroy, Almeida, D. (2021, November). *Positive events and physical activity in daily life for middle-aged and older adults* [Symposium Presentation]. Gerontological Society of America Annual Scientific Meeting, online.
- Benson, L.**, & Ong, A. D. (2020, November). *Positive emotion buffers the association between stress and depressive symptoms* [Symposium Presentation]. Gerontological Society of America Annual Scientific Meeting, online.
- Benson, L.**, Oravec, Z., Brick, T. R., Ram, N. (2020, April). *Dynamic bidirectional associations among emotion and physical activity in daily life: A Bayesian multilevel vector autoregressive approach* [Flash Talk Presentation]. Society for Affective Science Conference, San Francisco, CA.
- Geiger, N., Swim, J.K., & **Benson, L.** (2020, February). *Lay evaluations of the three pillars of sustainability and climate policy* [Symposium Presentation]. Society for Personality and Social Psychology Convention, Sustainability Preconference, New Orleans, LA.
- Benson L.**, Oravec, Z., Brick, T. R., Ram, N. (2020, February). *Dynamic bidirectional associations among emotion and physical activity in daily life: A Bayesian multilevel vector autoregressive approach* [Symposium Presentation]. University of Maryland - Pennsylvania State University Graduate Student Mini Conference, College Park, MD.
- Benson, L.**, English, T., Conroy, D. E., Pincus, A. L., Gerstorff, D., & Ram, N. (2019, April). *Age-related differences in emotion regulation strategy use, variability, and flexibility: An experience sampling approach* [Symposium Presentation]. 3rd Annual Graduate Research Symposium, State College, PA.
- Benson, L.**, English, T., Conroy, D. E., Pincus, A. L., Gerstorff, D., & Ram, N. (2019, March). *Age differences in reappraisal and suppression depend on relational and emotional contextual features of daily life social interactions* [Flash Talk Presentation]. Society for Affective Science Conference, Boston, MA.
- Gatzke-Kopp, L., **Benson, L.**, Ryan, P., Ram, N. (2019, March). *Autonomic coordination in children is dynamic, and modulated by cortical engagement* [Symposium Presentation]. SRCD Biennial Meeting, Baltimore, MD.
- Benson, L.**, Ram, N. (2017, December). *Super-Tweeters: Text Time-Series Data* [Flash Talk Presentation]. Using Twitter Data in Social, Demographic, and Behavioral Science Research Conference, State College, PA.
- Lougheed, J. P., **Benson, L.**, Cole, P. M., & Ram, N. (2017, May). *Examining emotion dynamics with survival analysis: An application to self-regulation in early childhood* [Symposium Presentation]. Association for Psychological Science convention, Boston, MA.
- Benson, L.**, Ram, N., Ong, A.D., Zautra, A.J., Conroy, D.E., Pincus, A.L., Almeida, D.M. (2015, November). *Fusing biodiversity, biomarkers, and emotion into intensive longitudinal investigations of healthy aging* [Symposium Presentation]. Gerontological Society of America Annual Scientific Meeting, Orlando, FL.
- Benson, L.**, Forgeard, M.J.C. (2015, August). *Parenting for creativity: The role of mastery experiences in childhood* [Symposium Presentation]. American Psychological Association Convention, Toronto, CA.

Benson, L., Ram, N., Almeida, D., Zautra, A., Conroy, D., Pincus, A., Ong, A. (2015, June). *Using diversity as a metric for capturing emotion experiences over time* [Symposium Presentation]. Society for Ambulatory Assessment: 4th Biennial Conference, State College, PA.

Steinberg, E., Kern, M. L., Steinberg, L., & **Benson, L.** (2013, June). *Beyond depression: The EPOCH measure of adolescent flourishing* [Symposium Presentation]. International Positive Psychology Association Third World Congress, Los Angeles, CA.

Kern, M.L., & **Benson, L.** (2012, March). *Positive adolescent health: What matters over time?* [Symposium Presentation]. 14th Biennial Meeting of the Society for Research on Adolescence, Vancouver, Canada.

Benson, L., Saffran, J., Shutts, K., & Edwards, J. (2011, May). *Six- and 14-month infants' ability to differentiate dialects in their native language* [Flash Talk]. University of Wisconsin Undergraduate Research Symposium, Madison, WI.

Poster Presentations

*Jimpkoski, M., Tung, I., Xu, X., Capellari, E., & **Benson, L.** (2025, April). *Digital technologies for emotional awareness and emotional regulation during the transition to parenthood: A scoping review.* [Poster Presentation]. Undergraduate Research Symposium, University of Michigan, Ann Arbor, MI.

Benson, L., Patrick, M. (February, 2025). *When do young adults experience specific drinking consequences? A within- and between-person analysis using data from the Young Adult Daily Life study.* [Poster Presentation]. Monitoring the Future 50th Anniversary Celebration, University of Michigan, Ann Arbor, MI.

Businelle, M. S., **Benson, L.,** Neil, J., Hébert, E. T., Kendzor, D. E., Frank-Pearce, S., Kezbers, K., Vidrine, D., & Gaur, A. (2023, September). *A novel smartphone-based intervention for adults who are not ready to quit smoking.* [Poster Presentation]. Society for Research on Nicotine and Tobacco, Europe Meeting, London, UK.

Benson, L., Hébert, E. T., *Stanley, N., *Montgomery, A., Kendzor, D. E., Alexander, A., Wetter, D. W., Businelle, M. S. (2023, April). *Contingency management is associated with lower smoking risk and longer periods of smoking abstinence during a quit attempt* [Poster Presentation]. Society of Behavioral Medicine Annual Meeting, Phoenix, AZ.

*Montgomery, A., **Benson, L.,** Hébert, E. T., *Stanley, N., Bejarano, G., Kendzor, D. E., Alexander, A., Wetter, D. W., Businelle, M. S. (2023, March). *Contingency management is associated with lower smoking risk and longer periods of smoking abstinence during a quit attempt.* [Poster Presentation]. Society for Research on Nicotine and Tobacco Annual Meeting, San Antonio, TX

Benson, L., Ra, C. K. K., Hébert, E. T., Kendzor, D. E., Oliver, J. A., Frank-Pearce, S. G., Businelle, M., S. (2022, April). *Momentary negative affect reactivity to smoking urges differs pre- vs. post-quit and by intervention treatment group* [Poster Presentation]. Society for Behavioral Medicine Scientific Meeting, Baltimore, MD.

*De La Torre, I., **Benson, L.,** Alexander, A., Kendzor, D. E., Kezbers, K. K., Frank-Pearce, S. G., Hébert, E. T., Businelle, M., S. (2022, April). *Positive affect in the morning is associated*

with the intensity of smoking urges later in the day during a quit attempt [Poster Presentation]. Society for Behavioral Medicine Scientific Meeting, Baltimore, MD.

*Min, J., **Benson, L.**, Ra, C. K. K., Hébert, E. T., Kendzor, D. E., Frank-Pearce, S. G., Businelle, M., S. (2022, April). *Negative affect and stress are associated with moment-to-moment change in motivation during a smoking cessation attempt* [Poster Presentation]. Society for Behavioral Medicine Scientific Meeting, Baltimore, MD.

Felt, J.M., Harrington, K.D., Ram, N., O'Donnell, K., Sliwinski, M., Pokhvisneva, I., **Benson, L.**, Meaney, M., Putnam, F., Noll, J., & Shenk, C.E. (2022, April). *Individual Differences in Epigenetic Age Acceleration and Associations with Midlife Cognitive Functioning* [Poster Presentation]. Society for Behavioral Medicine. Baltimore, MD.

Hakun, JG, Elbich, DE, **Benson, L.**, Masters, L, Mossavar-Rahmani, Y, Buxton, O. (2022, April). *Cognitive Health Benefits of Everyday Physical Activity* [Poster Presentation]. Cognitive Aging Scientific Meeting.

Benson, L., Ra, C. K. K., Hébert, E. T., Kendzor, D. E., Oliver, J. A., Frank-Pearce, S. G., Businelle, M., S. (2022, March). *Quit stage and intervention type differences in the momentary within-person association between negative affect and smoking urges* [Poster Presentation]. Annual Cancer Research Symposium, Oklahoma City, OK.

*Min, J., **Benson, L.**, Ra, C. K. K., Hébert, E. T., Kendzor, D. E., Frank-Pearce, S. G., Businelle, M., S. (2022, March). *Negative affect and stress are associated with moment-to-moment change in motivation during a smoking cessation attempt* [Poster Presentation]. Annual Cancer Research Symposium, Oklahoma City, OK.

*Ulm, C., Kezbers, K., **Benson, L.**, Kendzor, D.E., Frank-Pearce, S., Neil, J., De La Torre, I., & Businelle, M.S. (2022, March). *Relationship between sleep quality and readiness to change weight related health behaviors in smokers unmotivated to quit* [Poster Presentation]. Annual Cancer Research Symposium, Oklahoma City, OK.

Van Doren, N., Dickens, C., **Benson, L.**, Brick, T.R., Gatzke-Kopp, L., Oravec, Z. (2022, February). *Capturing emotion coherence in daily life: Using ambulatory physiology measures and ecological momentary assessments to examine within-person associations and individual differences* [Poster Presentation]. Emotion Pre-Conference of the Society of Personality and Social Psychology; San Francisco, CA.

Gilchrist, J. D., **Benson, L.**, Conroy, D. E., Sabiston, C. M. (2019, June). *Emodiversity in breast cancer survivors: Associations with mental and physical health* [Poster Presentation]. North American Society for the Psychology of Sport and Physical Activity conference, Baltimore, MD.

Ramsook, K., **Benson, L.**, Ram, N., Cole, P. (2019, March). *A Little Anger Goes a Long Way: Age-Related Change in Preschoolers' Persistence* [Poster Presentation]. SRCD Biennial Meeting, Baltimore, MD.

Benson, L., Ram, N., & Stifter, C. (2017, May). *Borrowing differential equations from ecology and using dynamic systems models to capture developmental change in self- and co-regulation processes* [Poster Presentation]. Association for Psychological Science Convention, Boston, MA.

- Roepke, A. M., **Benson, L.**, Tsukayama, E., & Yaden, D. B. (2016, May). *Prospective writing intervention fosters posttraumatic growth by increasing attention to future possibilities* [Poster Presentation]. Association for Psychological Science Convention, Chicago, IL.
- Roepke, A. M., **Benson, L.**, Yaden, D. B., Tsukayama, E., & Seligman, M. E. P. (2015, February). *Randomized controlled trial of prospective writing, an intervention for facilitating growth after adversity*. [Poster Presentation]. Annual Meeting of the Society for Personality and Social Psychology, Long Beach, CA.
- Benson, L.**, Kern, M.L., & Steinberg, L. (2014, May). *Prospective links between adolescent perseverance and adult health: An integrative data analysis approach* [Poster Presentation]. Modern Modeling Methods Conference, Storrs, CT.
- Benson, L.**, Kern, M.L., & Steinberg, L. (2013, June). *Deciphering prospective links between perseverance and health: An integrative approach* [Poster Presentation]. International Positive Psychology Association Third World Congress, Los Angeles, CA.
- Forgeard, M.J.C., & **Benson, L.** (2013, May). *Extracurricular involvement and well-being: The mediating role of mastery and creative agency* [Poster Presentation]. 25th APS Annual Convention, Washington, D.C., USA.
- Benson, L.**, Kern, M.L., Steinberg, E., & Steinberg, L. (2013, April). *An Integrative Approach to Studying Positive Psychological and Physical Health from Adolescence into Adulthood* [Poster Presentation]. SRCD 2013 Biennial Meeting, Seattle, WA.

WORKSHOPS, TUTORIALS, AND SUPPLEMENTARY MATERIALS

- Perski, O., **Benson, L.**, Goldstein, S., Klasnja, P., & Alshurafa, N. (2025, March). *Analytical techniques to inform the construction of JITAs: Hands-on guidance and worked examples applied to intensive longitudinal data*. Society for Behavioral Medicine Annual Meeting Pre-Conference Workshop, San Francisco, CA.
- Benson, L.** (2025, February). *Comprehensive Program for Adaptive Interventions Training in Education (CATIE) Institute*. Data Science for Dynamic Intervention Decision-Making Center (d3c), University of Michigan, Ann Arbor, MI.
- Benson, L.** (2024, October). *Future of Adaptive Interventions Research (FAIR) Summit*. Data Science for Dynamic Intervention Decision-Making Center (d3c), University of Michigan, Ann Arbor, MI.
- Benson, L.** (2023, December). *Just-in-time adaptive interventions and MRTs: Introduction*. College of Nursing, University of South Carolina, Columbia, SC.
- Benson, L.** (2019, June). APA-ATI Intensive Longitudinal Data: Session E - Intraindividual Variability Metrics. <https://quantdev.ssri.psu.edu/tutorials/apa-ati-intensive-longitudinal-data-session-e-intraindividual-variability-metrics>
- Benson, L.** (2019, June). APA-ATI Intensive Longitudinal Data: Session E - Intraindividual Variability Metrics. <https://quantdev.ssri.psu.edu/tutorials/apa-ati-intensive-longitudinal-data-session-e-intraindividual-variability-metrics>

- Benson, L.** (2019, June). APA-ATI Intensive Longitudinal Data: Session V - Diff-Eq Models. <https://quantdev.ssri.psu.edu/tutorials/apa-ati-intensive-longitudinal-data-session-v-diff-eq-models>
- Benson, L.** (2017, August). Introductory R workshop. Invited by the Huck Life Science Graduate Advisory Committee. The Pennsylvania State University, State College, PA.
- Benson, L.,** & Ram, N. (2017). Intro - basic confirmatory factor analysis. <https://quantdev.ssri.psu.edu/tutorials/intro-basic-confirmatory-factor-analysis>
- Benson, L.,** & Wood, J. (2017) Intro to geospatial data and maps in R. <https://quantdev.ssri.psu.edu/tutorials/intro-geospatial-data-and-maps-r>
- Benson, L.** (2017). Using the qualtrics and boxr R packages. <https://quantdev.ssri.psu.edu/tutorials/using-qualtrics-and-boxr-r-packages>
- Benson, L.** (2017). Generating a custom color palette function in R. <https://quantdev.ssri.psu.edu/tutorials/generating-custom-color-palette-function-r>
- Benson, L.,** Ram, N., Almeida, D. M., Zautra, A. J., Ong, A. D. (2017). Emodiversity Supplementary Analyses - As U Live Data. <https://quantdev.ssri.psu.edu/tutorials/emodiversity-supplementary-analyses-u-live-data>
- Benson, L.,** Ram, N., Almeida, D. M., Zautra, A. J., Ong, A. D. (2017). Diversity-type intraindividual variability calculation. <https://quantdev.ssri.psu.edu/tutorials/diversity-type-intraindividual-variability-calculation>
- Benson, L.,** Lougheed, J. P. (2017). Part 1: How to format data for several types of survival analysis models. <https://quantdev.ssri.psu.edu/tutorials/part-1-how-format-data-several-types-survival-analysis-models>
- Benson, L.,** Lougheed, J. P. (2017). Part 2: Single-episode, discrete-time Cox regression model with time-invariant predictors. <https://quantdev.ssri.psu.edu/tutorials/part-2-single-episode-discrete-time-cox-regression-model-time-invariant-predictors>
- Benson, L.,** Lougheed, J. P. (2017). Part 3: Single-episode, discrete-time Cox regression model with time-varying predictors. <https://quantdev.ssri.psu.edu/tutorials/part-3-single-episode-discrete-time-cox-regression-model-time-varying-predictors>
- Benson, L.,** Lougheed, J. P. (2017). Part 4: Recurring-episode, discrete time Cox regression model with time-invariant predictors. <https://quantdev.ssri.psu.edu/tutorials/part-4-recurring-episode-discrete-time-cox-regression-model-time-invariant-predictors>
- Benson, L.,** Lougheed, J. P. (2017). Part 5: Recurring-episode, discrete time Cox regression model with time-varying predictors. <https://quantdev.ssri.psu.edu/tutorials/part-5-recurring-episode-discrete-time-cox-regression-model-time-varying-predictors>
- Benson, L.** (2015, November). Introductory R Workshop. Invited by the Student Chapter of the Institute for Operations Research and Management Sciences (informs). The Pennsylvania State University, State College, PA.

TEACHING

- Nov., 2024 **Guest Lecturer, graduate level.** Experience Sampling Methods in Health Behaviors and Outcomes (EXSC 755). Department of Exercise Science, University of South Carolina.
Methods for Optimizing Just-in-Time Adaptive Interventions.
- June, 2020 **TA, American Psychological Association Advanced Training Institute for the Analysis of Intensive Longitudinal Data: Experience Sampling and Ecological Momentary Assessment**
Instructors: Kevin J. Grimm, PhD, Nilam Ram, PhD, Niall Bolger, PhD, and J-P Laurenceau, PhD
<https://www.apa.org/science/resources/ati/analysis-longitudinal-data>
- Spring, 2020 **TA, Strategies for Data Analysis in Developmental Research (Multivariate Statistics)**
Department of Human Development and Family Studies, the Pennsylvania State University, taught by Nilam Ram, PhD
- June, 2019 **TA, American Psychological Association Advanced Training Institute for the Analysis of Intensive Longitudinal Data: Experience Sampling and Ecological Momentary Assessment**
Instructors: Kevin J. Grimm, PhD, Nilam Ram, PhD, Niall Bolger, PhD, and J-P Laurenceau, PhD
Arizona State University, Tempe, AZ
<https://www.apa.org/science/resources/ati/analysis-longitudinal-data>
Developed and taught lab sections on intraindividual variability metrics, multilevel modeling and differential equation modeling; answered participant questions during independent work time
- 2017 **Created Course Content, HDFS Longitudinal Structural Equation Modeling - Graduate Level**
Assisted Peter Molenaar, PhD in creating course content for Longitudinal Structural Equation Modeling graduate level course
- March, 2018 **Guest Lecturer, HDFS Multivariate Statistics – Graduate Level**
An end-to-end workflow pipeline: Merging data science and developmental science
- Nov., 2017 **Guest Lecturer, HDFS Applied Statistics – Graduate Level**
An end-to-end workflow pipeline: Merging data science and developmental science
- Fall 2015 **Graduate Instructor, Applied Statistics Laboratory – Graduate Level**
Department of Human Development and Family Studies, the Pennsylvania State University, advised by Zita Oravec, PhD
- Fall 2015 **TA, Methods for Research in Human Development - Graduate Level**
Department of Human Development and Family Studies, the Pennsylvania State University, taught by Zita Oravec, PhD
- 2013-2014 **Statistics Tutor, University of Pennsylvania**

- 2012 **Positive Psychology Recitation Leader**
Department of Psychology, University of Pennsylvania
Taught by Angela Duckworth, PhD
- 2011 **Child Psychology Teaching Fellow**
Department of Psychology, University of Wisconsin-Madison
Taught by Jenny Saffran, PhD

VOLUNTEER AND SERVICE WORK

- 2020-2022 **Guest Associate Co-Editor** for a special issue in the *Journal of Social and Personal Relationships* on Integrating Multiple Time-Scales to Advance Relationship Science
- 2021 **Panelist** on Psychology Postdoctoral Fellowships for graduate students
University of Alabama, Professor Summer Braun
- 2021 **Panelist** on Psychology career paths for students enrolled in Rose State Practicum
TSET Health Promotion Research Center, Professor Amy Cohn
- 2021 **Panelist** for an undergraduate Psychology class on Psychology career paths,
Springfield College, Professor Kingsley Schroeder
- 2019- **Ad Hoc Reviewer**
Publons account:
<https://publons.com/researcher/3070317/lizbeth-benson/peer-review/>
Journals include: *Emotion, Multivariate Behavioral Research, The Journals of Gerontology: Social Sciences*
- 2016- **Graduate student reviewer in training**
Served as a co-reviewer for several manuscripts under the guidance of Nilam Ram
Journals include: *Journal of Cognition and Development, Child Development Perspectives, Psychology and Aging, Journal of Research on Adolescence*
- 2015-2020 President of the We R: R Users Group @ Penn State
Officially recognized Penn State organization geared toward interdisciplinary collaborative teaching and learning of the R statistical and graphics platform
- 2014- Graduate Women in Science Outreach Initiatives
- 2013-2014 Scienteer at iPraxis in Philadelphia, PA
- 2010-2011 Chair of the Psi Chi Brownbag & Research Fair Committee
Department of Psychology, University of Wisconsin Madison

MEDIA

The Gerontological Society of America (2018). Methodological Innovations in Gerontology: Advances in Psychosocial Research Webinar. Retrieved from
<https://www.youtube.com/watch?v=HtPNKYouMMY>

MacMillan (2017). Why having lots of feelings is good for your health. *Time*. Retrieved from <http://time.com/collection/guide-to-happiness/4828450/positive-emotions-inflammation/>

American Psychological Association (2017). Accentuate the positive to reduce risk of chronic disease. *Science Daily*. Retrieved from <https://www.sciencedaily.com/releases/2017/06/170622121946.htm>

Christopher Bergland (2017). A diverse spectrum of positive emotions reduces inflammation. *Psychology Today*. Retrieved from <https://www.psychologytoday.com/us/blog/the-athletes-way/201706/diverse-spectrum-positive-emotions-reduces-inflammation>

Kira M. Newman (2017). Is it healthy to have more variety in your emotions? *Greater Good Magazine*. Retrieved from https://greatergood.berkeley.edu/article/item/is_it_healthy_to_have_more_variety_in_your_emotions