

INBAL BILLIE NAHUM-SHANI

CURRICULUM VITAE

May 2024

University of Michigan
Institute for Social Research

426 Thompson Street, Room 2464
Ann Arbor, MI 48106-1248
E-mail: inbal@umich.edu

RESEARCH INTERESTS

My research focuses on developing novel methodologies and behavioral theory to inform adaptive interventions, namely interventions that use ongoing information about the individual to modify the type/intensity/delivery-mode of support.

Health Psychology:

- Adaptive Interventions
- Just-In-Time Adaptive Interventions
- Mobile Health (mHealth)
- Intervention Engagement
- Social Support, Stress and Health

Research Methods:

- Sequential Multiple Assignment Randomized Trial (SMART)
- Factorial and Fractional Factorial Designs
- Micro-Randomized Trials (MRTs)
- Hybrid Experimental Designs (HEDs)
- Multilevel Experimental Designs and Data Analytics

EDUCATION

Ph.D. Behavioral and Management Sciences (2008)

Technion - Israel Institute of Technology, Israel

M.A. Educational Leadership and Policy (Cum Laude 2003)

School of Education, Haifa University, Israel

B.A. Educational Leadership and Sociology (2001)

School of Education, Haifa University, Israel

POSITIONS HELD

- 2023-present **Research Professor (with tenure)**
Institute for Social Research
University of Michigan
- 2018-present **Founder and Director**
Data-Science for Dynamic Decision-Making Center (d3c)
Institute for Social Research
University of Michigan
- 2017-2023 **Research Associate Professor (with tenure)**
Institute for Social Research
University of Michigan
- 2013-2017 **Research Assistant Professor**
Institute for Social Research
University of Michigan
- Research Fellow**
Smithers Institute for Alcohol-Related Workplace Studies
Cornell University
- 2010 – 2013 **Faculty Research Fellow**
Survey Research Center, Institute for Social Research
University of Michigan
- 2008-2009 **Research Associate (post-doctoral fellow)**
The Methodology Center
Pennsylvania State University
- 2004-2008 **Data Analyst**
Statistics Lab, School of Industrial Engineering and Management, Technion: Israel
Institute of Technology
- 2003-2005 **Project Coordinator**
Haifa-Boston Leadership Foundation
Haifa, Israel
- 2002-2004 **Project Coordinator**
Substance Abuse Prevention Institute
Haifa, Israel
- 2000-2002 **Project Coordinator**
The Unit of Academic Planning and Evaluation
Haifa University, Haifa, Israel

AWARDS

- 2020 Michigan Institute for Data Science Reproducibility Challenge Award: Translating Strategies for Promoting Engagement in Mobile Health: A Micro-randomized Feasibility Trial
- 2017 University of Michigan Research Faculty Recognition Award
- 2015 Outstanding Reviewer Award; Academy of Management: Academy of Management Discoveries.
- 2007 Best Dissertation Award; Academy of Management: Human Resource / SHRM Foundation
- 2002 Cum Laude for graduate students, Haifa University, Haifa, Israel.
- 2001 Cum Laude for graduate students, Haifa University, Haifa, Israel.

GRANTS

- 2024 **R01DA058996 (NIH/NIDA)**, 5/24-2/29; \$ 2,474,085
Novel Methods to Inform mHealth Interventions for Substance Use
PI: Ertefaie/Nahum-Shani
Role: MPI
- a2 Pilot Award in AI and technology (NIH/NIA)**; 4/24-3/25; \$285,000
A Digital Dyadic Coach to Promote Oral Health Self-Care in Older Adults
PI: Nahum-Shani/Murphy/Shetty
Role: Contact PI
- R01 GM15254901 (NIH/NIGMS)**, 3/24-11/27; \$1,223,984
Leveraging ML algorithms and data integration techniques to improve efficiency of causal moderation analyses of micro-randomized trial data.
PI: Dempsey
Role: Co-Investigator
- R34MH13305701 (NIH/NIMH)**, 4/2024-2/2027; \$702,000
Facilitating effective coping to reduce suicide risk following ED discharge: A micro-randomized trial to develop an adaptive text-based intervention.
PI: Czyz/Horwitz
Role: Co-Investigator
- 2022 **R324 B220001 (IES)**, 7/22 - 6/25; \$800,000
Comprehensive Program for Adaptive Interventions Training in Education Sciences
PI: Almirall/Nahum-Shani
Role: MPI
- U01 CA229437-04S1 (NIH/NCI)**, 9/2020-8/2021; \$100,000
Supplement to 'novel use of mHealth data to identify states of vulnerability and receptivity to JITAIs.

PI: Nahum-Shani/Wetter
Role: Contact PI

2021

P50 DA054039 (NIH/NIDA), 9/21 - 6/26; \$13.2M
Center for Methodologies for Adapting and Personalizing Prevention, Treatment and Recovery Services for SUD and HIV (MAPS Center)
PI: Nahum-Shani/Almirall/Collins/Murphy
Role: Contact PI

R01 AA027994 (NIH/NIAAA), 4/2021 - 3/2026; \$518,547
Evaluation and optimization of a just-in-time messaging intervention to reduce alcohol-facilitated intimate partner violence perpetration among at-risk young adult men and women.
PI: Stappenbeck
Role: Co-Investigator (Site PI)

R01 MH126871 (NIH/NIMH), 7/2021 - 6/2026; \$151,030
Adaptive intervention to prevent adolescent suicidal behavior following psychiatric hospitalization: A Sequential Multiple Assignment Randomized Trial.
PI: Czyz
Role: Co-Investigator

R01 HD103904 (NIH/NICHD), 7/2021 - 6/2026; \$191,660
mHealth-based just-in-time adaptive intervention to improve physical activity levels of individuals with spinal cord injury.
PI: Hiremath
Role: Co-Investigator (Site PI)

R01 MH125857 (NIH/NIMH), 12/2021 - 11/2026; \$129,463
Testing adaptive interventions to improve PTSD treatment outcomes in federally qualified health centers.
PI: Sripada
Role: Co-Investigator

P01 AA029547 (NIH/NIAAA), 6/2021 - 5/2026; \$419,425
SHARE Program: Innovations in translational behavioral science to improve self-management of alcohol and HIV in adolescents and emerging adults.
PI: Naar
Role: Co-Investigator (Site PI)

U01 CE003382 (CDC), 9/2021 - 9/2026; \$86,659
Michigan Youth Violence Prevention Center (YVPC): Building evidence for gun violence prevention.
PI: Zimmerman
Role: Co-Investigator

2020

R01 DA039901 (NIH/NIDA), 9/15 - 5/25; \$2,913,828
Novel methods for intensive longitudinal data in SMART studies of drug use and HIV.
PI: Nahum-Shani/Almirall
Role: Contact PI

R34 MH124767 (NIH/NIMH), 9/2020 - 8/2023; \$702,000

Developing text-based support for parents of suicidal adolescents after emergency department visits: A multi-component intervention pilot.

PI: Czyz

Role: Co-Investigator

U01 CA229437-03S1 (NIH/NCI), 9/2020-8/2021; \$214,062

Supplement to 'novel use of mHealth data to identify states of vulnerability and receptivity to JITAIs'.

PI: Nahum-Shani/Wetter

Role: Contact PI

2019

UG3 DE028723 (NIH/NIDCR), 4/19 - 3/25; \$623,644

Personalized digital behavior change interventions to promote oral health. PI: Shetty

Role: Co-Investigator (Site PI)

R01 CA224537 (NIH/NCI), 1/19 - 12/22; \$281,166

Affective science and smoking cessation: Real-time, real-world assessment.

PI: Lam

Role: Co-Investigator (Site PI)

Redleaf Foundation, 6/19 - 6/20; \$26,996

The utility and feasibility of mobile technology in prevention interventions to promote child and family mental health: A Demonstration and feasibility project among military families.

PI: Gewirtz

Role: Co-Investigator (Site PI).

U01 CA229437 (NIH/NCI), 9/18 - 8/22; \$2,535,251

Novel use of mHealth data to identify states of vulnerability and receptivity to JITAIs.

PI: Nahum-Shani/Wetter

Role: Contact PI

R01 AA026574 (NIH/NIAAA), 9/18 - 8/21; \$463,478

An adaptive preventive intervention (API) to optimize the transition from universal to indicated resources for college student alcohol use.

PI: Patrick

Role: Co-Investigator

PCS 2017C2-7613 (PCORI), 10/18 - 9/20; \$35,840

Multi-level interventions for increasing tobacco cessation at FQHCs.

PI: Wetter

Role: Co-Investigator (Site PI)

MICHR Accelerating Synergy, 9/2018 - 8/2019; \$100,000

Center for adaptive interventions for prevention/intervention for youth substance abuse.

PI: Walton/Nahum-Shani

Role: MPI

R324 B180003 (IES), 7/18 - 6/21; \$438,479

Getting SMART about adaptive interventions in education.

PI: Almirall/Nahum-Shani

Role: MPI

- 2016 **R01 DK108678 (NIH/NIDDK)**, 3/16 - 2/21; \$179,077
SMART weight loss management.
PI: Spring/Nahum-Shani
Role: MPI
- 2015 **R01 DA039901 (NIH/NIDA)**, 9/15 - 7/20; \$3,051,515
Novel longitudinal methods for SMART studies of drug abuse and HIV.
PI: Nahum-Shani/Almirall
Role: Contact PI
- P50 DA039838 (NIH/NIDA)**, 9/15 - 8/20; \$2,497,042
Innovative methods for constructing just-in-time adaptive interventions.
PI: Collins; Project Lead: Murphy
Role: Co-Investigator
- R01 AA023187 (NIH/NIAAA)**, 9/15 - 8/20; \$2,922,274
Data-based methods for just-in-time adaptive interventions in alcohol use.
PI: Murphy
Role: Co-Investigator.
- 2014 **P50 DA10075 (NIH/NIDA) Pilot Study Funding**
Developing just in time adaptive interventions for promoting mental health among college students.
PI: Collins
Role: Pilot Study PI
- U54 EB020404 (NIH)**, 9/14 - 9/20; \$618,351
Center of excellence on mobile sensor data-to-knowledge (MD2K).
PI: Kumar
Role: Co-Investigator
- R01 MH103244 (NIH/NIMH)**, 4/14 - 3/19; \$3,104,133
Electronic bridge to mental health (eBridge) for college students.
PI: King
Role: Co-Investigator.
- 2013 **UM Global Challenges for the Third Century, Phase I**, 06/13 - 05/14; \$251,000
Engaging the student community to develop a universal, video-based mental health intervention for young people.
PI: Eisenberg
Role: Co-Investigator
- R01 AA022113 (NIH/NIAAA)**, 11/13 - 10/18; \$379,628
The college-to-work transition & alcohol misuse.
PI: Bacharach
Role: Co-Investigator (Site PI).
- Blue Cross Blue Shield of Michigan Foundation Award**, 07/13 - 12/14; \$74,934
Online innovative video-based intervention.

PI: Eisenberg
Role: Co-Investigator

RC1 AA019092 (NIH/NIAAA), \$61,657
Statistical methods for sequential treatment decisions in alcoholism.
PI: Lynch
Role: Co-Investigator (Site PI).

University of Michigan's Interdisciplinary Committee on Organizational Studies (ICOS); Small Grant, \$8,000
Aggression in healthcare organizations
PI: Nahum-Shani
Role: PI

Mcubed University of Michigan, 01/13 - 08/14; \$60,000
Developing real-time adaptive interventions using mobile technology.
Role: MPI.

2008 **P50 DA10075 (NIH/NIDA) Pilot Study Funding,**
Conceptual and methodological framework for understanding help-seeking dynamics.
PI: Collins
Role: Pilot Study PI

PUBLICATIONS

* Student/Mentored research

** Senior author

*** Senior and corresponding author

1. Carey, R.L.,* Le, H., Coffman, D.L., **Nahum-Shani, I.**, Thirumalai, M., Hagen, C., Baehr, L.A., Schmidt-Read, M., Lamboy, M.S.R., Kolakowsky-Hayner, S.A., Marino, R.J., Intille, S.S., Hiremath, S.V.* (in press). Mobile health-based just-in-time adaptive intervention to improve physical activity levels of individuals with spinal cord injury: Protocol for a randomized controlled trial. *JMIR Research Protocols*. <http://dx.doi.org/10.2196/57699>
2. **Nahum-Shani, I.**, & Yoon, C. (in press). Towards the science of engagement with digital interventions. *Current Directions in Psychological Science*.
3. Jones, D.R.,* Potter, L.N.,* Schlechter, C.R., Lam, C.Y., **Nahum-Shani, I.**, Fagundes, C., & Wetter, D.W. (in press). Examining associations between distinct emotions and tobacco lapse during a quit attempt among African American smokers. *Annals of Behavioral Medicine*.
4. Xie, Q.,* Riordan, K.M., Baldwin, S.A., Simonsson, O., Hirshberg, M.J., Dahl, C. J., **Nahum-Shani, I.**, Davidson, R.J., & Goldberg, S.B.* (in press). Is informal practice associated with outcomes in loving-kindness and compassion training? Evidence from pre-post and daily diary assessments. *Behaviour Research and Therapy*.
5. Bayrakdarian, N.D., Bonar, E.E., Duguid, I., Hellman, L., Salino, S., Wilkins, C., Jannausch, M., McKay, J.R., Staton, M., Dollard, K., **Nahum-Shani, I.**, Walton, M.A., Blow, F.C., & Coughlin, L.N.* (in press). Acceptability and feasibility of a mobile behavioral economic health intervention to reduce alcohol use in adults in rural areas. *Drug and Alcohol Dependence Reports*.

6. **Nahum-Shani, I.**, Greer, Z.M., Trella, A.L., Zhang, K.W., Carpenter, S.M., Ruenger, D., Elashoff, D., Murphy, S.A., Shetty, V. (in press). Optimizing an adaptive digital oral health intervention for promoting oral self-care behaviors: Micro-randomized trial protocol. *Contemporary Clinical Trials*.
7. Spring, B., Pfammatter, A.F., Scanlan, L., Daly, E., Reading, J., Battalio, S., McFadden, G., Hedeker, D., Siddique, J., **Nahum-Shani, I.**** (in press). Adaptive behavioral intervention for weight loss management: A non-inferiority randomized clinical trial. *JAMA*.
8. Xie, Q.,* Dyer, R. L., Lam, S., Frye, C., Dahl, C. J., Quanbeck, A., **Nahum-Shani, I.**, Davidson, R. J., & Goldberg, S. B. (in press). Understanding the implementation of informal meditation practice in a smartphone-based intervention: A qualitative analysis. *Mindfulness*.
9. Potter, L. N.,* **Nahum-Shani, I.**, & Wetter, D.W. (in press). Editorial: Digital technology for tobacco control: Novel data collection, study designs, and interventions. *Frontiers in Digital Health*.
10. Carpenter, S.M.,* Greer, Z.M., Newman, R., Murphy, S.A., Shetty, V., & **Nahum-Shani, I.**** (in press). Developing message strategies to engage racial and ethnic minority groups in digital oral self-care interventions: A participatory co-design approach. *JMIR Formative Research*.
11. Collins, L.M., **Nahum-Shani, I.** Guastaferrero, K., Strayhorn, J.C., Vanness, D.J., & Murphy, S.A. (in press). Intervention optimization: A paradigm shift and its potential implications for clinical psychology. *Annual Review of Clinical Psychology*.
12. **Nahum-Shani, I.**, & Naar, S. (2023). Digital adaptive behavioral interventions to improve HIV prevention and care: Innovations in intervention approach and experimental design. *Current HIV/AIDS Reports*. <https://doi.org/10.1007/s11904-023-00671-z>
13. Dziak, J. J., Almirall, D., Dempsey, W., Stanger, C., & **Nahum-Shani, I.**** (2023). SMART binary: New sample size planning resources for SMART studies with binary outcome measurements. *Multivariate Behavioral Research*. <https://arxiv.org/abs/2110.05535v3>
14. Sripada, R. K., Peterson, C. L., Dziak, J. J., **Nahum-Shani, I.**, Roberge, E. M., Martinson, A. A., ... & Chard, K. (2023). Using the multiphase optimization strategy to adapt cognitive processing therapy (CPT MOST): study protocol for a randomized controlled factorial experiment. *Trials*, 24(1), 676.
15. Davis-Ewart, L., Grov, C., Verhagen, R., Manuel, J., Viamonte, M., Dilworth, S., O'Dell, N., Valentin, O., Carr, S., Cherenack, E., Henderson, C., Doblecki-Lewis, S., **Nahum-Shani, I.**, & Carrico, A. W. (2023). Motivational Enhancement Interventions to Increase Pre-Exposure Prophylaxis Use in Sexual Minority Men Who Use Stimulants: Protocol for a Pilot Sequential Multiple Assignment Randomized Trial. *JMIR Research Protocols*, 12(1), e48459.
16. Cadmus-Bertram, L.,* Solk, P., Agnew, M., Starikovskiy, J., Schmidt, C., Morelli, W.A., Hodgson, V., Freeman, H., Muller, L., Mishory, A., Naxi, S., Carden, L., Tevaarwerk, A.J., Wolter, M., Barber, E., Spencer, R., Sesto, M.E., Gradishar, W., Gangnon, R., Spring, B., **Nahum-Shani, I.**, & Phillip, S.M.,* (2023). A multi-site trial of an electronic health integrated physical activity promotion intervention in breast and endometrial cancers survivors: MyActivity study protocol. *Contemporary Clinical Trials*, 130, 107187.
17. Chow, S-M., **Nahum-Shani, I.**, Baker, J. T., Spruijt-Metz, D., Allen, N.B., Auerbach, R.P., Dunton, G. F., Friedman, N.P., Intille, S., Klasnja, P., Marlin, B., Nock, M.K., Rauch, S.L., Pavel, M., Vrieze, S., Wetter, D.W., Kleiman, E.M., Brick, T.R., Perry, H., Wolff-Hughes, D.L. & Intensive Longitudinal

Health Behavior Network (ILHBN) (2023). The Intensive Longitudinal Health Behavior Network (ILHBN): Challenges, opportunities, and solutions from harmonizing data under heterogeneous study designs, target populations, and measurement protocols. *Translational Behavioral Medicine*, 13(1), 7-16.

18. Czyz, E. K., King, C. A., Al-Dajani, N., Zimmermann, L., Hong, V., & **Nahum-Shani, I.*** (2023). Ecological momentary assessments and passive sensing in the prediction of short-term suicidal ideation in young adults. *JAMA Network Open*, 6(8), e2328005-e2328005.
19. Czyz, E.K.,* Koo, H.J.,* Al-Dajani, N.,* King, C.A., & **Nahum-Shani, I.**** (2023). Predicting short-term suicidal thoughts in adolescents using machine learning: Developing decision tools to identify daily-level risk after hospitalization. *Psychological Medicine*, 53(7), 2982-2991.
20. Davis-Ewart, L., Grov, C., Verhagen, R., Manuel, J., Viamonte, M., Dilworth, S., Valentin, O., Cherenack, E.M., Carr, S., Doblecki-Lewis, S., **Nahum-Shani, I.**, & Carrico, W.A. (2023). Randomized controlled trial of motivational enhancement interventions to increase pre-exposure prophylaxis use in sexual minority men who use stimulants. *Research Square*. <https://doi.org/10.21203/rs.3.rs-2787003/v1>
21. Liu, S., Bamberger, P.A., & Wang, M., **Nahum-Shani, I.**, Larimer, M., Bacharach, S. (2023). Behavior change versus stability during the college-to-work transition: Life course and the “stickiness” of alcohol misuse at career entry. *Personnel Psychology*, 76(3), 945-975.
22. Montal-Rosenberg, R., Bamberger, P. A., **Nahum-Shani, I.**, Wang, M., Larimer, M., & Bacharach, S. B. (2023). Supervisor undermining, social isolation and subordinates’ problematic drinking: The role of depression and perceived drinking norms. *Journal of Drug Issues*, 53(1), 37-60.
23. **Nahum-Shani, I.**, Dziak, J.J., Venera, H.,* Pfammatte, A.F., Spring, B., & Dempsey, W. (2023). Design of experiments with sequential randomizations on multiple timescales: The hybrid experimental design. *Behavior Research Methods*.
24. Potter, L. N.,* Schlechter, C. R.,* **Nahum-Shani, I.**, Lam, C. Y., Cinciripini, P. M., & Wetter, D. W. (2023). Socio-economic status moderates within-person associations of risk factors and smoking lapse in daily life. *Addiction*, 118(5), 925-934.
25. Potter, N.L.,* Yap, J.,* Dempsey, H.W., Wetter, W.D., & **Inbal Nahum Shani**** (2023). Integrating intensive longitudinal data (ILD) to inform the development of dynamic theories of behavior change and intervention design: A case study of scientific and practical considerations. *Prevention Science*. <https://doi.org/10.1007/s11121-023-01495-4>
26. Sobolev, M.,* Anand, A.,* Dziak, J.J., Potter, N.L., Lam, Y.C., Wetter, W.D., & **Nahum-Shani, I.**** (2023). Time-varying model of engagement with digital self reporting: Evidence from smoking cessation longitudinal studies. *Frontiers in Digital Health*, 5, 1144081.
27. Sripada R,K.,* Smith, K., Walters, H.M., Ganoczy, D., Kim, H.M., Grau, P.P., **Nahum-Shani, I.**, Possemato, K.K., Kuhn, E.R., Zivin, K., Pfeiffer, P.N., Bohnert, K.M., Cigrang, J., Avallone, K., & Rauch, S.A.M. (2023). Testing adaptive interventions to improve PTSD treatment outcomes in federally qualified health centers: Protocol for a randomized clinical trial. *Contemporary Clinical Trials*, 129, 107182.
28. Trella, A. L.,* Zhang, K. W., **Nahum-Shani, I.**, Shetty, V., Doshi-Velez, F., & Murphy, S. A. (2023). Reward design for an online reinforcement learning algorithm supporting oral self-care. *Proceedings of the AAAI Conference on Artificial Intelligence*, 37(13), 15724-15730.

29. Yap, J.,* Dziak, J.J., Maiti, R.,* Lynch, K., McKay, J., Chakraborty, B., & **Nahum-Shani, I.**** (2023). Sample size estimation for comparing dynamic treatment regimens in a SMART: a Monte Carlo-based approach and case study with longitudinal overdispersed count outcomes. *Statistical Methods in Medical Research*, 32(7), 1267-1283.
30. Anderson, M.A.,* Budney, A.J., Jacobson, N.C., **Nahum-Shani, I.**, & Stanger, C. (2022). End user participation in the development of an ecological momentary intervention to improve coping with cannabis cravings: Formative study. *JMIR Formative Research*, 6(12), e40139.
31. Carpenter, S.M.,* Yap, J., Patrick, M.E., Morrell, N., Dziak, J.J., Almirall, D., Yoon, C., & **Nahum-Shani, I.***** (2022). Self-relevant appeals to engage in self-monitoring of alcohol use: A micro-randomized trial (2022). *Psychology of Addictive Behaviors*, 37(3), 434–446.
32. Coughlin, L.N.,* Bonar, E.E., Walton, M.A., Fernandez, A., Duguid, I. & **Nahum-Shani, I.**** (2022). New directions for motivational incentive interventions for smoking cessation. *Frontiers in Digital Health*, 4, 803301.
33. Horwitz, A.,* Czyz, E.,* Al-Dajani, N.,* Dempsey, W., Zhao, Z., **Nahum-Shani, I.**, & Sen, S. (2022). Utilizing daily mood diaries and wearable sensor data to predict depression and suicidal ideation among medical interns. *Journal of Affective Disorders*, 313(15), 1-7.
34. Militello, L., Sobolev, M.,* Okeke, F.,* Adler, D.A., & **Nahum-Shani, I.**** (2022). Digital prompts to increase engagement with the headspace app and for stress regulation among parents: Feasibility study. *JMIR Formative Research*, 6(3), e30606.
35. **Nahum-Shani, I.**, Dziak, J.J., Walton, M.A., Dempsey, W. (2022). Hybrid experimental designs for intervention development: What, why and how. *Advances in Methods and Practices in Psychological Science*, 5(3). <https://doi.org/10.1177/25152459221114279>
36. **Nahum-Shani, I.**, Dziak, J.J., & Wetter, D.W. (2022). MCMTC: A pragmatic framework for selecting an experimental design to inform the development of digital interventions. *Frontiers in Digital Health*, 4, 798025.
37. **Nahum-Shani, I.**, Shaw, S.,* Carpenter, S.,* M., Murphy, S. A., & Yoon C. (2022). Engagement in digital interventions. *American Psychologist*. Advance online publication. <https://doi.org/10.1037/amp0000983>
38. Ullah, M.A.,* Chatterjee, S.,* Fagundes, C.P., Lam, C., **Nahum-Shani, I.**, Rehg, J.M., Wetter, D.W., Kumar, S. (2022). mRisk: Continuous risk estimation for smoking lapse from noisy sensor data with incomplete and positive-only labels. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*, 6(3), 1–29.
39. Trella, A.L.,* Zhang, K.W., **Nahum-Shani, I.**, Shetty, V., Doshi-Veles, F., Murphy, S.A. (2022). Designing reinforcement learning algorithms for digital interventions: Pre-implementation guidelines. *Algorithms*, 15(8), 255; <https://doi.org/10.3390/a15080255>
40. Qian, T.,* Walton, A.E.,* Collins, L.M., Klasnja, P., Lanza, S.T., **Nahum-Shani, I.**, Rabbi, M., Russell, M.A., Walton, M.A., Yoo, H., Murphy, S.A., (2022). The micro-randomized trial for developing digital interventions: Experimental design and data analysis considerations. *Psychological Methods*, 27(5), 874–894.
41. Battalio, S.,* Conroy, D.E., Dempsey, W., Menictas, M.,* Murphy, S.A., **Nahum-Shani, I.**, Qian, T.,* Kumar, S., & Spring, B. (2021). Sense2Stop: A Micro-randomized trial using wearable sensors to optimize a just-in-time-adaptive stress management intervention for smoking relapse prevention. *Contemporary Clinical Trials*, 109, 106534.

42. Coughlin, L.,* **Nahum-Shani, I.**, Bonar, E.E., Philyaw-Kotov, M., Rabbi, M., Klasnja, P., & Walton, M.A., (2021). Toward a JITAI to reduce young adult alcohol use: Testing approaches for identifying when to intervene. *Substance Use & Misuse*, 54(14), 2115-2125.
43. Coughlin, L.N.,* **Nahum-Shani, I.**, Kotov, M., Bonar, E.E., Rabbi, M., Klasnja, P., Murphy, S.A., & Walton, M.A., (2021). Developing an adaptive intervention for substance use prevention among adolescents and emerging adults: Feasibility and acceptability of a mobile health app. *JMIR mHealth and uHealth*, 9(1), e24424.
44. Czyz, E.K.,* King, C.A., Prouty, D., Micol, V.J., Walton, M., & **Nahum-Shani, I.**** (2021). Adaptive intervention for prevention of adolescent suicidal behavior after hospitalization: A pilot sequential multiple assignment randomized Trial. *Journal of Child Psychology and Psychiatry*, 62(8), 1019-1031.
45. Gibson, B., Kramer, H., Weir, C., Fiol, G., Borbolla, D., Schlechter, C.R., Lam, C., Nelson, M., Bohner, C., Schulthies, S., Sieperas, T., Pruhs, A., **Nahum-Shani, I.**, Fernandez, M.E., & Wetter, D.W. (2021). Workflow analysis for design of an electronic health record-based tobacco cessation intervention in community health centers. *JAMIA Open*, ooaa070, <https://doi.org/10.1093/jamiaopen/ooaa070>.
46. Hojjatinia, S.,* Daly, E., Hnat, T., Hossain, S., Kumar, S., Lagoa, C., **Nahum-Shani, I.**, Samiei, S., Spring, & Conroy, D. (2021). Dynamic models of stress-smoking responses based on high-frequency sensor data. *Nature NPJ Digital Medicine*, 4(1), 1-11.
47. **Nahum-Shani, I.**, Potter, L.N.,* Lam, C.Y., Yap, J., Moreno, A., Stoffel, R., Wu, Z., Wan, N., Dempsey, W., Kumar, S., Ertin, E., Murphy, S.A., Rehg, J.M., & Wetter, D.W. (2021). The Mobile Assistance for Regulating Smoking (MARS) micro-randomized trial design protocol. *Contemporary Clinical Trials*, 110, 106513.
48. **Nahum-Shani, I.**, Rabbi, M.,* Yap, J., Philyaw-Kotov, M.L., Klasnja, P., Bonar, E.E., Cunningham, R.M., Murphy, S.A., & Walton, M.A., (2021). Translating strategies for promoting engagement in mobile health: A proof-of-concept micro-randomized trial. *Health Psychology*, 40(12), 974–987.
49. Patrick, M.E., Lyden, G.R., Morrell, N., Mehus, C.J., Gunlicks-Stoessel, M., Lee, C.M., King, C.A., Bonar, E.E., **Nahum-Shani, I.**, Almirall, D., Larimer, M.E., & Vock, D.M. (2021). Outcomes of M-Bridge: A sequential multiple assignment randomized trial (SMART) for developing an adaptive preventive intervention for college drinking. *Journal of Consulting and Clinical Psychology*, 89(7), 601-614.
50. Roberts, G., Clemens, N., Doabler, C.T., Vaughn, S., Almirall, D., & **Nahum-Shani, I.**** (2021). Multi-tiered systems of support, adaptive interventions and SMART designs. *Exceptional Children*, 88(1), 8-25.
51. Schlechter, C. R.,* Del Fiol, G., Lam, C. Y., Fernandez, M. E., Greene, T., Yack, M., Schulthies, S., Nelson, M., Bohner, C., Pruhs, A., Siaperas, T., Kawamoto, K., Gibson, B., **Nahum-Shani, I.**, Walker, T. J., & Wetter, D. W. (2021). Application of community – engaged dissemination and implementation science to improve health equity. *Preventive Medicine Reports*, 24, 101620.
52. Stanger, C., Kowatsch, T., Xie, H., **Nahum-Shani, I.**, Lim-Liberty, F., Anderson, M., ... Rosenberg, B. (2021). A digital health intervention (SweetGoals) for young adults with type 1 diabetes: Protocol for a factorial randomized trial. *JMIR Research Protocols*, 10(2), e27109.

53. Artman, W.,* **Nahum-Shani, I.** Wu, T., McKay, J., & Ertefaie, A. (2020). Power analysis in a SMART design: Sample size estimation for determining the best embedded dynamic treatment regime. *Biostatistics*, 21(3), 432–448.
54. Carpenter, S.M.,* Menictas, M.,* **Nahum-Shani, I.** Wetter, D.W., Murphy, S.A. (2020). Developments in mobile health just-in-time adaptive interventions for addiction science. *Current Addiction Reports*, 7, 280–290.
55. Czyz, E.K.,* Yap, J., & King, C. A., & **Nahum-Shani, I.**** Using intensive longitudinal data to identify early predictors of suicide-related outcomes in high-risk adolescents: Practical and conceptual considerations (2020). *Assessment*. 1073191120939168.
56. Fernandez, M.E., Schlechter, C.R., Del Fiol, G., Gibson, B., Kawamoto, K., Siaperas, T., Pruhs, A., Greene, T., **Nahum-Shani, I.**, Schulthies, S., Nelson, M., Bohner, C., Kramer, H., Borbolla, D., Austin, S., Weir, C., Walker, T.W., Lam, C, Y., & Wetter, D.W. (2020). QuitSMART Utah: An implementation study protocol for a cluster-randomized, multi-level Sequential Multiple Assignment Randomized Trial to increase reach and impact of tobacco cessation treatment in community health centers. *Implementation Science*, 15(1), 1-13.
57. Ghosh, P.,* **Nahum-Shani, I.**, Spring, B., & Chakraborty, B. (2020). Non-inferiority and equivalence tests in sequential, multiple assignment, randomized trials (SMARTs). *Psychological Methods*, 25(2), 182–205.
58. Moreno, A.,* Wu, Z., Yap, J., Wetter, D. Lam, C., **Nahum-Shani, I.**, Rehg, J. (2020). A functional EM algorithm for panel count data with missing counts. *Proceedings of 2020 Neural Information Processing Systems*, 33, 19828-19838.
59. **Nahum-Shani, I.**, Almirall, Yap, J.R., D. McKay, J., Lynch, K., Freiheit, E., & Dziak, J.J. (2020). SMART longitudinal analysis: A tutorial for using repeated outcome measures from SMART studies to compare adaptive interventions. *Psychological Methods*, 25(1), 1–29.
60. Patrick, M. E., Boatman, J. A., Morrell, N., Wagner, A. C., Lyden, G. R., **Nahum-Shani, I.**, King, C. A., Bonar, E. E., Lee, C. M., Larimer, M. E., Vock, D. M., & Almirall, D. (2020). A sequential multiple assignment randomized trial (SMART) protocol for empirically developing an adaptive preventive intervention for college student drinking reduction. *Contemporary Clinical Trials*, 96, 106089.
61. Seewald, J.N.,* Kidwell, M.K., **Nahum-Shani, I.**, Wu, T., McKay, R.J., & Almirall, D. (2020). Sample size considerations for comparing dynamic treatment regimens in a sequential multiple-assignment randomized trial with a continuous longitudinal outcome. *Statistical Methods in Medical Research*, 29(7), 1891-1912.
62. Dziak, J.J. Yap, J.R., Almirall, D. McKay, J., Lynch, K., & **Nahum-Shani, I.**** (2019). A data analysis method for using longitudinal binary outcome data from a SMART to compare adaptive interventions. *Multivariate Behavioral Research*, 54(5), 613-636.
63. Levy, R., Mathai, M., Chatterjee, P., Onger, L., Njuguna, S., ... **Nahum-Shani, I.**, McCulloch, C.E., & Meffert, S.M. (2019). Implementation research for public sector mental health care scale-up (SMART-DAPPER): A sequential multiple, assignment randomized trial (SMART) of non-specialist-delivered psychotherapy and/or medication for major depressive disorder and posttraumatic stress disorder (DAPPER) integrated with outpatient care clinics at a county hospital in Kenya. *BMC Psychiatry*, 19(1), 1-14.

64. **Nahum-Shani, I.** & Almirall, D. (2019). An Introduction to Adaptive Interventions and SMART Designs in Education (NCSE 2020-001). U.S. Department of Education. Washington, DC: National Center for Special Education Research. Retrieved from <https://ies.ed.gov/ncser/pubs/>.
65. **Nahum-Shani, I.**, & Bamberger, P.A. (2019). The lingering effects of work context: Ambient work unit characteristics and the impact of retirement on alcohol consumption. *Human Relations, 72*(4), 675-705.
66. Pfammatter, A.F.,* **Nahum-Shani, I.**, DeZelar, M., Scanlan, L., McFadden, G., Siddique, J., Hedeker, D., & Spring, B. (2019). SMART: Study protocol for a sequential multiple assignment randomized controlled trial to optimize weight loss management. *Contemporary Clinical Trials, 82*, 36-45.
67. Wagner III, B.,* Barskey, M., **Nahum-Shani, I.**, & Park, S.Y. (2019). ewrapper: Perceived receptivity to engagement strategies in mHealth. *Conference Companion Publication of the 2019 on Computer Supported Cooperative Work and Social Computing* (pp. 398-402).
68. Almirall, D., Kasari, C., McCaffrey, D.F., & **Nahum-Shani, I.** (2018) Developing optimized adaptive interventions in education. *Journal of Research on Educational Effectiveness, 11*(1), 27-34.
69. Bamberger, P.A., Koopmann, J., Wang, M., Larimer, M., **Nahum-Shani, I.**, Geisner, I., & Bacharach, S.B. (2018). Does college alcohol consumption impact employment upon graduation? Findings from a prospective study. *Journal of Applied Psychology, 103*(1), 111.
70. Bidargaddi, N., Almirall, D., Murphy, S., **Nahum-Shani, I.**, Kovalcik, M., Pituch, T., ... Strecher, V. (2018). To prompt or not to prompt? A microrandomized trial of time-varying push notifications to increase proximal engagement with a mobile health app. *JMIR mHealth and uHealth, 6*(11).
71. Czyz, E.,* K., King, C. A., & **Nahum-Shani, I.**** (2018). Ecological assessment of daily suicidal thoughts and attempts among suicidal teens after psychiatric hospitalization: Lessons about feasibility and acceptability. *Psychiatry Research, 267*, 566-574.
72. Geisner, I.M., Koopmann, J., Bamberger, P., Wang, M., Larimer, M.E., **Nahum-Shani, I.**, & Bacharach, S. (2018). When the party continues: impulsivity and the effect of employment on young adults' post-college alcohol use. *Addictive Behaviors, 77*, 114-120.
73. **Nahum-Shani, I.** & Militello, L.K. (2018). Promoting military family well-being with digitally-supported adaptive and just-in-time adaptive interventions: Opportunities and challenges. *The National Academies of Sciences, Engineering, and Medicine consensus study: The Well-Being of Military Families*. Commissioned paper.
74. **Nahum-Shani, I.**, Dziak, J.J., & Collins, L.M. (2018). Multilevel factorial designs with experiment-induced clustering. *Psychological Methods, 23*(3), 458-479.
75. **Nahum-Shani, I.**, Smith, S.N.* Spring, B.J., Collins, L.M., Witkiewitz, K., Tewari, A., & Murphy, S.A. (2018). Just-in-time adaptive interventions (JITAI) in mobile health: Key components and design principles for ongoing health behavior support. *Annals of Behavioral Medicine, 52*(6), 446-462.
76. Rabbi, M.,* Kotov, M. P., Cunningham, R., Bonar, E.E., **Nahum-Shani, I.**, Klasnja, P., ... Murphy, S. (2018). Toward increasing engagement in substance use data collection: development of the Substance Abuse Research Assistant app and protocol for a microrandomized trial using adolescents and emerging adults. *JMIR Research Protocols, 7*(7), e166.

77. Walton, A.,* **Nahum-Shani, I.**, Crosby, A., Klasnja, P., & Murphy, S.A. (2018). Optimizing digital integrated care via micro-randomized trials. *Clinical Pharmacology & Therapeutics*, 104(1), 53-58.
78. **Nahum-Shani, I.**, Ertefaie, A.,* Lu, X., McKay, J.R., Lynch, K.G., Oslin, D., & Almirall, D. (2017). A SMART data analysis method for constructing adaptive treatment strategies for substance use disorders. *Addiction*, 112(5), 901-909.
79. Rabbi, M.,* Philyaw-Kotov, M., Lee, J., Mansour, A., Dent, L., Wang, X., Cunningham, R., Bonar, E., **Nahum-Shani, I.**, Klasnja, P. & Walton, M. (2017). SARA: a mobile app to engage users in health data collection. *Proceedings of the 2017 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2017 ACM International Symposium on Wearable Computers* (pp. 781-789).
80. Wagner III, B.,* Liu, E.,* Shaw, S. D.,* Iakovlev, G., Zhou, L., Harrington, C., ... **Nahum-Shani, I.**** (2017). eWrapper: Operationalizing engagement strategies in mHealth. *Proceedings of the 2017 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2017 ACM International Symposium on Wearable Computers* (pp. 790-798).
81. Almirall D., DiStefano, C., Chang, Y., Shire, S., Kaiser, A., Lu, X., **Nahum-Shani, I.**, Landa, R., Mathy, P., & Kasari, C. (2016). Longitudinal effects of adaptive interventions with a speech-generating device in minimally verbal children with ASD. *Journal of Clinical Child and Adolescent Psychology*, 45(4), 442 - 456.
82. Ertefaie, A.,* Wu, T.,* Lynch, K., & **Nahum-Shani, I.**** (2016) Identifying a set that contains the best dynamic treatment regimes. *Biostatistics*, 17(1), 135-148.
83. Lu, X.,* **Nahum-Shani, I.**, Kasari, C., Lynch, K.G., Oslin, D.W., Pelham, W.E., Fabiano, G. & Almirall, D., (2016). Comparing dynamic treatment regimes using repeated-measures outcomes: modeling considerations in SMART studies. *Statistics in Medicine*, 35(10) 1595–1615.
84. Sarker, H.,* Tyburski, M., Rahman, M. M., Hovsepian, K., Sharmin, M.,* Epstein, D. H., Preston, C.D., Furr-Holden, A., Milam, A., **Nahum-Shani, I.**, al’Absiet, M., & Kumar, S. (2016). Finding significant stress episodes in a discontinuous time series of rapidly varying mobile sensor data. *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (pp. 4489-4501).
85. Dempsey, W.,* Liao, P., Klasnja, P., **Nahum-Shani, I.**, & Murphy, S. A. (2015). Randomized trials for the Fitbit generation. *Significance*, 12(6), 20-23.
86. Jakicic, J. M., Sox, H., Blair, S. N., Bensink, M., Johnson, W. G., King, A. C., Lee, I. M., **Nahum-Shani, I.**, Sallis, J. F., Sallis, R. E., Craft, L., Whitehead, J. R., & Ainsworth, B. E. (2015). Comparative effectiveness research: A roadmap for physical activity and lifestyle. *Medicine and Science in Sports and Exercise*, 47(8), 1747-1754.
87. Kumar, S., Abowd, G., Abraham, W., al’Absi, M., Beck, J.G., Chau, D.H., Condie, T., Conroy, D.E., Ertin, E., Estrin, D., Ganesan, D., Lam, C., Marlin, B., Marsh, C.B., Murphy, S.A., **Nahum-Shani, I.**, Patrick, K., Rehg, J., Sharmin, M., Shetty, V., Sim, I., Spring, B., Srivastava, M., & Wetter, D. (2015). Center of excellence for mobile sensor data-to-knowledge (MD2K). *Journal of the American Medical Informatics Association*, 22(6), 1137-1142.
88. **Nahum-Shani, I.**, & Bamberger, P.A. (2015). A lingering ambiance: Pre-retirement work context and the impact of retirement on drinking behavior. In John Humphreys (Ed.), *Proceedings of the*

Seventy-fifth Annual Meeting of the Academy of Management (best paper). Online ISSN: 2151-6561.

89. **Nahum-Shani, I.**, Hekler, E. B., & Spruijt-Metz, D. (2015). Building health behavior models to guide the development of just-in-time adaptive interventions: A pragmatic framework. *Health Psychology, 34*, 1209-1219.
90. Sharmin, M.,* Raij, A., Epstein, D., **Nahum-Shani, I.**, Beck, G., Vhaduri, S., Preston, K., & Kumar, S. (2015). Visualization of time-series sensor data to inform the design of just-in-time adaptive stress interventions. *Proceedings of the 2015 ACM International Joint Conference on Pervasive and Ubiquitous Computing* (pp. 505-516).
91. Almirall D., **Nahum-Shani, I.**, Sherwood, N.E., & Murphy, S.A. (2014). Introduction to SMART designs for the development of adaptive interventions: With application to weight loss research. *Translational Behavioral Medicine, 4*(3), 260-274.
92. Collins, L., **Nahum-Shani, I.**, & Almirall, D. (2014). Optimization of behavioral dynamic treatment regimens based on the sequential, multiple assignment, randomized trial (SMART). *Clinical Trials, 11*(4), 426-434.
93. **Nahum-Shani, I.**, Henderson*, M.M., Lim, S., M.M., & Vinokur, A.D. (2014) Supervisor support: Does it buffer or exacerbate the adverse effects of supervisor undermining? *Journal of Applied Psychology, 99*(3), 484-503.
94. Bodovski, K., **Nahum-Shani, I.**, & Walsh, R. (2013). School climate and students' early mathematics learning: Another search for contextual effects. *American Journal of Education, 119*(2), 209-234.
95. Dziak, J., **Nahum-Shani, I.**, & Collins, L. (2012) Multilevel factorial experiments: Power and conceptual considerations. *Psychological Methods, 17*(2), 153-175.
96. Lei, H.,* **Nahum-Shani, I.**, Lynch, K., Oslin, D., & Murphy, S.A. (2012). Using Sequential, Multiple Assignment, Randomized Trial (SMART) designs to build individualized treatment sequences. *Annual Review of Clinical Psychology, 8*, 21-48.
97. **Nahum-Shani, I.**, Qian, M.,* Almirall, D., Pelham, W.E., Gnagy, B., Fabiano, G., Waxmonsky, J., Yu, J., & Murphy, S. (2012). Q-Learning: A secondary data analysis method for developing adaptive interventions. *Psychological Methods, 17*(4), 478-494.
98. **Nahum-Shani, I.**, Qian, M.,* Almirall, D., Pelham, W.E., Gnagy, B., Fabiano, G., Waxmonsky, J., Yu, J., & Murphy, S. (2012). Experimental design and primary data analysis for developing adaptive interventions. *Psychological Methods, 17*(4), 457-477.
99. **Nahum-Shani, I.**, & Bamberger, P.A. (2011b). The buffering effect of social support on stressor-strain relations: The conditioning effects of perceived reciprocity patterns. *Organizational Behavior and Human Decision Processes, 114*, 49-63.
100. **Nahum-Shani, I.**, & Bamberger, P.A. (2011a). Work hours, retirement and supportive relations among older adults. *Journal of Organizational Behavior, 32*, 345-369.
101. **Nahum-Shani, I.**, Bamberger, P.A., & Bacharach, S.B. (2011). Social support and well-being among blue collar workers: The conditioning effects of perceived patterns of supportive Exchange. *Journal of Health and Social Behavior, 52*, 123-139.
102. **Nahum-Shani, I.**, & Somech, A. (2011). Leadership, OCB and individual differences: Idiocentrism and allocentrism as moderators of the relationship between transformational and transactional leadership and OCB. *Leadership Quarterly, 22*, 353-366.

103. Cohen, A., **Nahum-Shani, I.**, & Doveh, E. (2010). Further insight and additional inference methods for polynomial regression applied to the analysis of congruence. *Multivariate Behavioral Research*, 45, 828-852.
104. Cohen, A., Doveh, E., & **Nahum-Shani, I.** (2009). Testing agreement for multi-item scales with indices rwg(J) and ADM(J). *Organizational Research Methods*, 12, 148-164.
105. Bamberger, P., Kohn, E., & **Nahum-Shani, I.** (2008). Aversive workplace conditions and employee grievance filing: The moderating effects of gender and ethnicity. *Industrial Relations*, 47, 229-260.

BOOK CHAPTERS AND OPEN SCIENCE STUDY PROTOCOLS

* Student/Mentored research

** Senior author

1. **Nahum-Shani, I.** Smart interventions. (2023). In M.R. Mehl, M. Rid, C. Wrzus, G. Harari, and U. Ebner-Priemer. (Eds.), *Mobile Sensing in Psychology: Methods and Applications*. Guilford.
2. **Nahum-Shani, I.**, Wetter, D.W., & Murphy, S.A. (2022). Adapting just-in-time interventions to vulnerability and receptivity: Conceptual and methodological considerations. In N. Jacobson, L. Marsch & T. Kowatsch (Eds.), *Digital Therapeutics for Mental Health and Addiction: State of the Science and Vision for the Future*. Elsevier
3. Carpenter, S.M.,* Patrick, M., Morrell, N., **Nahum-Shani, I.**** (2020). Leveraging self-relevance to engage young adults in self-monitoring of alcohol use. *Open Science Framework: Study Protocol*.
4. El-Toukhy, S. & **Nahum-Shani, I.**** (2019). The JITAI Code: A primer on just-in-time-adaptive interventions. *Wiley StatsRef: Statistics Reference Online*.
5. Hall, K.L.,* **Nahum-Shani, I.**, August, G., Patrick, M.E., Murphy, S.A., & Almirall, D. (2019). Adaptive intervention designs in substance use prevention. In Sloboda Z., Petras H., Robertson E., Hingson R. (Eds.) *Prevention of Substance Use. Advances in Prevention Science*. Springer, Cham (pp. 263-280).
6. Almirall, D., **Nahum-Shani, I.**, Wang, L., & Kasari, C. (2018). Experimental designs for research on adaptive interventions: Singly- and sequentially-randomized trials. In L.M. Collins and K.C. Kugler (Eds.) *Advanced Topics in the Optimization of Behavioral and Biobehavioral Interventions* (pp. 89-120).
7. **Nahum-Shani, I.** & Dziak, J.J. (2018) Multilevel factorial designs in behavioral intervention development. In L.M. Collins and K.C. Kugler (Eds.) *Advanced Topics in the Optimization of Behavioral and Biobehavioral Interventions* (pp. 47-87).
8. Rabbi, M.,* Philyaw-Kotov, M., Klasnja, P., Bonar, E., **Nahum-Shani, I.**, Walton, M., & Murphy, S.A. (2017). SARA - substance abuse research assistant. *Open Science Framework: Study Protocol*.
9. Sarker, H.,* Hovsepian, K.,* Chatterjee, S., **Nahum-Shani, I.**, Murphy, S.A., Spring, B., ... & Kumar, S. (2017). From markers to interventions: The case of just-in-time stress intervention. In Rehg, J., Murphy, S.A., Kumar, S. (Eds.) *Mobile Health*. Springer, Cham (pp. 411-433).
10. Dallery, J., Riley, W.T., & **Nahum-Shani, I.** (2015). Research designs to develop and evaluate technology-based health behavior interventions. In L. Marsch, S. Lord, and J. Dallery (Eds.) *Leveraging Technology to Transform Behavioral Healthcare*. Oxford University Press.

11. **Nahum-Shani, I.**, Xi, L., Henderson, M.M.,* & Murphy, S.A. (2013). Innovative experimental design for developing effective technology-supported help-seeking interventions. In S.A. Karabenick and M. Puustinen (Eds). *Advances in Help Seeking Research and Applications: The Role of Information and Communication Technologies*.
12. Qian, M.,* **Nahum-Shani, I.**, Murphy, S. (2013). Dynamic treatment regimes. In X. Tu and W. Tang (Eds.). *Modern Clinical Trial Analysis*. Springer Science.

PROFESSIONAL CONFERENCES/PRESENTATIONS

* Student/Mentored research

1. Xie, Q.,* Dyer, R. L., Lam, S., Frye, C., Dahl, C. J., Quanbeck, A., **Nahum-Shani I.**, Davidson, R. J., & Goldberg, S. B. (May, 2024). Understanding the Implementation of Informal Meditation Practice in a Smartphone-Based Intervention: A Qualitative Analysis [Oral Presentation]. In Q. Xie (Chair), *Advancing Scalability and Accessibility of Meditation-Based Interventions Through Implementation Science*. Symposium conducted at the 2024 Association for Psychological Science Annual Convention, San Francisco, CA.
2. Yu, Q.,* Yap, J., Potter, L., Jones, D., Lam, C., Wetter, D., & **Nahum-Shani, I.** (March, 2024). Engage With What? Strategies to Promote Mobile App Engagement and Digital Engagement with Intervention in Tobacco Cessation. Poster presentation, the Society of Behavioral Medicine Annual Meeting, Philadelphia, PA.
3. Dziak, J., & **Nahum-Shani, I.** (March, 2024). Evidence-Based Selection of Adaptive Intervention Tailoring Rules: Decision Times, Cutoffs, and Hybrid Experimental Designs. Poster presentation, the Society of Behavioral Medicine Annual Meeting, Philadelphia, PA.
4. **Nahum-Shani, I.**, Almirall, D., & Guastaferrro, K. (March, 2024). Adaptive Interventions: Innovations in Intervention and Experimental Design. Pre-Conference Workshop, the Society of Behavioral Medicine Annual Meeting, Philadelphia, PA.
5. Lansing, A. H.,* **Nahum-Shani, I.**, Murphy, S., Shani, G., & Stanger, C. (March, 2024). Co-Designing a Parent-Teen Dyadic Digital Intervention to Prevent Early Escalation of Substance Use. Invited presentation for the Joint Meeting on Prevention, Treatment, and Recovery Meeting, Baltimore, MD.
6. Florimbio, A. R.,* **Nahum-Shani, I.**, Wheeler, T., Campbell, M., Rodriguez, C., Bonar, E. E., Walton, M. A., Murphy, S., & Coughlin, L. N. (March, 2024). Content Development for a Mobile Health Intervention for Emerging Adults with Regular Cannabis Use. Poster presentation, the Society of Behavioral Medicine Annual Meeting, Philadelphia, PA.
7. Phillips, S.M., Solk, P., Freeman, H., Starikovisky, J., Carden, L.B., Agnew, M., Schmidt, C., Reading, J.M., Wang, S., Hasanaj, K., Tevaarwerk, A.J., Spring, B., Barber, E., Sesto, M.E., Gradishar, W., Hodgson, V., Muller, L., Naxi, S., Spencer, R., Gangnon, R., **Nahum-Shani, I.**, Cadmus-Bertram, L., & Pickett, K. (March, 2024). A 6-month, Multi-site Electronic Health Record-Integrated Physical Activity Intervention (MyActivity) Significantly Increases Physical Activity in Breast & Endometrial Cancer Survivors. Accepted for oral presentation. Annual Meeting of the American Society of Preventive Oncology, Chicago, IL.

8. Carpenter, S.M.,* Yap, J., Patrick, M.E., Morrell, N., Dziak, J.J., Almirall, D., Yoon, C., & **Nahum-Shani, I.**** (April, 2023). Self-Relevant Appeals to Engage in Self-Monitoring of Alcohol Use: A Micro-Randomized Trial. Society of Behavioral Medicine Annual Meeting, Phoenix, AZ.
9. Sobolev, M.,* Anand, A.,* Dziak, J.J., Potter, N.L., Lam, Y.C., Wetter, W.D., & **Nahum-Shani, I.**** (April, 2023). Time-varying model of engagement with digital self reporting: Evidence from smoking cessation longitudinal studies. Society of Behavioral Medicine Annual Meeting, Phoenix, AZ.
10. **Nahum-Shani, I.**, Dziak, J.J., Venera, H.,* Pfammatter, A.F., Spring, B., & Dempsey, W. (April, 2023). Design of Experiments with Sequential Randomizations on Multiple Timescales: The Hybrid Experimental Design. Society of Behavioral Medicine Annual Meeting, Phoenix, AZ.
11. Spring, B., Nahum-Shani, I., Battalia, S., Conroy, D., Daly, E., Dempsey, D., Hnat, T., Hoffman, S., Menictas, M., Murphy, S.A., Qian, T., Samiei, S.A., Yap, J., & Kumar, S. (April, 2023). When Should we Prompt Stress Management for Smokers Attempting to Quit? Results of the Sense2Stop Micro-Randomized Trial. Society of Behavioral Medicine Annual Meeting, Phoenix, AZ.
12. **Nahum-Shani, I.**, Carpenter, S.M.,* Yap, J., Patrick, M.E., Morrell, N., Dziak, J.J., Almirall, D., Yoon, C. (September, 2022). Self-Relevant Appeals to Engage in Self-Monitoring of Alcohol Use: A Micro-Randomized Trial. International Society for Research on Internet Interventions Annual Meeting, Pittsburgh, PA.
13. **Nahum-Shani, I.**, Dziak, J.J., Walton, M.A., Dempsey, W. (September, 2022). Hybrid experimental designs for intervention development: What, why and how. International Society for Research on Internet Interventions Annual Meeting, Pittsburgh, PA.
14. Carpenter, S.M.,* (Chair), **Nahum-Shani, I.**, (Organizer), Stanger, C., Walton, M.A, Naar, S., & Almirall, D. (April, 2022). SMART studies for developing adaptive interventions in substance use and HIV [Symposium]. Society of Behavioral Medicine Annual Meeting, Baltimore, MD.
15. Abbott, M.R.,* Dempsey, W., Taylor, J.M.G., **Nahum-Shani I.** (March, 2022). Modeling cigarette use with mobile health data from a study on smoking cessation. Michigan Student Symposium for Interdisciplinary Statistical Sciences. Ann Arbor, MI.
16. Abbott, M.R.,* Dempsey, W., **Nahum-Shani, I.**, Taylor, J.M.G. (March, 2022). A joint longitudinal-survival model for mobile health data. Eastern North American Region (ENAR) of the International Biometric Society (Virtual).
17. **Nahum-Shani, I.**, Shaw, S.,* Carpenter, S.M.,* Murphy, S.A., & Yoon. C. (May, 2021). Engagement in a digital world. Association for Psychological Science Annual Meeting. Presented by Carpenter, S.M. (Virtual).
18. **Nahum-Shani, I.** (expert discussant). (December 2020). Investigating the promise of mHealth for complementary and integrative health approaches. NIH/NCCIH academic consortium grand rounds session at the International Congress on Integrative Medicine and Health. With Lanay Mudd, Pamela Jeter, Jennifer Huberty, Judith Gordon, and Christopher Cox (Virtual).
19. Spring, B., Pfammatter, A., Scanlan, L., McFadden, H., Marchese, S., Siddique, J., Hedeker, D., & **Nahum-Shani, I.** (November, 2020). How low can we go? Optimal first line and augmentation treatment tactics for obesity stepped care. Poster presented at the Obesity Society Annual Meeting; Obesity, 28, page 106.
20. Spring, B., Pfammatter, A., Marchese, S., Martindale, L., Battalio, M.F.S., Stump, T. Hedeker, D., & **Nahum-Shani, I.** (November, 2020). Do digital interventions overcome socio-demographic

differences in weight loss initiation? Presentation at the Obesity Society Annual Meeting; Obesity, 28, page 15.

21. **Nahum-Shani, I.**, Yap, J., & Walton, M.A. (September, 2020). Developing workflows and templates for reproducing results from mobile health (mHealth) trials. Michigan Institute for Data Science Reproducibility Day. University of Michigan (online).
22. Coughlin, L.N.,* **Nahum-Shani, I.**, Bonar, E.E., Philyaw-Kotov, M.L., Rabbi, M., Klasnja, P., Cunningham, R.M., Murphy, S.A. & Walton, M.A. (July, 2020). Toward a just-in-time adaptive intervention to reduce adolescent and young adult alcohol use: Testing approaches for identifying when to intervene. Society for Prevention Research (online).
<https://www.preventionresearch.org/2020-annual-meeting/>
23. Lustria, M.L.A.,* Naar, S., Carpenter, S.M.,* & **Nahum-Shani, I.** (April, 2020). Design and development of a gamified mobile application to improve adherence to dietary self-monitoring. Paper presented at the Kentucky Conference on Health Communication (Virtual).
24. Nagesh, S.,* Moreno, A.,* Carpenter, S.M.,* Yap., J., Chatterjee, S., Lizotte, S.L., Neng, W., Kumar, S., Lam, C., Wetter, D., **Nahum-Shani, I.**, & Rehg, J. (December, 2020). Deep forecasting of EMA compliance: Distinguishing non-compliance from non-response. Neural Information Processing Systems (Online).
25. Carpenter, S.M.,* Yap, J., Lam, C., Wetter, D., & **Nahum-Shani, I.** (February, 2020). Emotions impact engagement among smokers during a quit attempt. Poster at the Meeting of the Society for Personality and Social Psychology Intervention Science Preconference, New Orleans, LA.
26. Coughlin, L.N.,* Bonar, E.E., Philyaw-Kotov, M.L., **Nahum-Shani, I.**, Rabbi, M., Klasnja, P., ... Walton, M.A. (June, 2019). Predicting alcohol and marijuana use in adolescents and emerging adults with the Substance Abuse Research Assistant (SARA) Mobile App. In Alcoholism-Clinical and Experimental Research (43, pp. 234A-234A).
27. Shaw, S.D.,* Yoon, C. Wagner, B.,* & **Nahum-Shani, I.** (March, 2019). Engagement in a digital world: An organizing framework for engagement strategies. Society for consumer psychology annual conference. Savannah, GA.
28. Walton, A.,* Collins, L., Crosby, L., Klasnja, P., **Nahum-Shani, I.**, Rabbi, M., Walton, M., Murphy, S. (October, 2018). The micro-randomized trial for developing mobile health interventions. Poster presentation at the Fifth Annual Mobile Data to Knowledge (MD2K) Meeting. Memphis, TN.
29. Walton, A.,* Collins, L., Crosby, L., Klasnja, P., **Nahum-Shani, I.**, Rabbi, M., Walton, M.A. & Murphy, S.A (October, 2018). The micro-randomized trial for developing mobile health interventions. Seminar at Penn State University Methodology Center, College of Health and Human Development. State College, PA.
30. Walton, A.,* Collins, L., Crosby, L., Klasnja, P., **Nahum-Shani, I.**, Rabbi, M., Walton, M.A. & Murphy, S.A (November, 2018). The micro-randomized trial for developing mobile health interventions. Poster presentation at the Technology in Psychiatry Summit. Boston, MA.
31. Czyz, E.C.,* Fernandez K.C., **Nahum-Shani, I.**, & King, C.A. (April, 2018). Feasibility and acceptability of ecological momentary assessment (EMA) with suicidal adolescents following psychiatric hospitalization. Poster presentation at the 50th American Association of Suicidology Annual Conference. Phoenix, AZ.
32. Tureen, T.,* Yap, J., Almirall, D., & **Nahum-Shani, I.** (April, 2018). R implementation for the analysis of zero-inflated count data from SMARTs: With application to substance use research.

Michigan Student Symposium for Interdisciplinary Statistical Sciences (MISSISS). University of Michigan, Ann Arbor, MI.

33. Seewald, N.J.,* **Nahum-Shani, I.**, McKay, J.R., & Almirall, D. (April, 2018). Sample size considerations for the analysis of continuous repeated-measures outcomes in sequential multiple-assignment randomized trials." Michigan Student Symposium for Interdisciplinary Statistical Sciences. Ann Arbor, MI.
34. Wagner, B.,* Shaw, S.D.,* Liu, E., Harrington, C., Naar, S., Abowd, G., Yoon, C., Kumar, S., Murphy, S.A., & **Nahum-Shani, I.** (April, 2018). ewrapper: Operationalizing engagement strategies in mHealth. Poster session presented at the Michigan Student Symposium for Interdisciplinary Statistical Sciences, Ann Arbor, MI.
35. Bonar, E.E., Rabbi, M.,* Murphy, S.A., **Nahum-Shani, I.**, Cunningham, R.M., Philyaw-Kotov, M.L., & Walton, M.A. (2018). Feasibility and acceptability of using a mobile phone app to assess substance use among adolescents and emerging adults [Abstract]. *Alcoholism: Clinical and Experimental Research*.
36. Czyz, E.C.,* King, C.A., & **Nahum-Shani, I.** (November, 2017). Examining feasibility and acceptability of ecological momentary assessment among adolescents at elevated suicide risk. Presentation at IASR/AFSP International Summit on Suicide Research. Henderson, NV.
37. Philyaw-Kotov, M.L.,* Rabbi, M., Murphy, S.A., Klasnja, P., Tewari, A., **Nahum-Shani, I.** & Bonar, E.E. (September, 2017). Feasibility and acceptability of using a mobile phone app to assess substance use among adolescents and emerging adults. *SAVIR Conference: Innovations in Injury Prevention Science; Injury Prevention 2017; 23(Suppl 1):A1–A62*. Ann Arbor, MI.
38. Czyz, E.C.,* King, C.A., & **Nahum-Shani, I.** (September, 2017). Examining feasibility and acceptability of ecological momentary assessment among adolescents at elevated suicide risk. Presentation at the Society for Advancement of Violence and Injury Research Conference. Ann Arbor, MI.
39. **Nahum-Shani, I.**, Yap J., Almirall D., Freiheit, E., McKay, J. R., Lynch, K. G., & Dziak, J.J. (August, 2017). Comparing adaptive interventions using longitudinal data methods. Paper Session: New Directions in General Psychology. The 125th Annual Convention of the American Psychological Association. Washington, D.C.
40. **Nahum-Shani, I.** (June, 2017). Common misconceptions regarding adaptive interventions and SMART studies. Workshop on development of adaptive treatment strategies in the management of drug dependence: Lessons learned from clinical trials currently in the field. College on Problems of Drug Dependence (CPDD) meeting. Montreal, Canada.
41. **Nahum-Shani, I.**, Spring, B., & Murphy, S.A. (March, 2017). Stress-management just-in-time adaptive interventions: Opportunities and challenges. Symposium on Harnessing mHealth Technology to Advance Intervention Research on Stress, Addiction, and Mental Health Disorders. The 75th Annual Scientific Meeting of the American Psychosomatic Society, Sevilla, Spain.
42. Seewald, J.N.,* **Nahum-Shani, I.**, McKay, J., & Almirall, D. (March, 2017). Sample size considerations for the analysis of continuous repeated-measures outcomes in sequential multiple-assignment randomized trials. Michigan Student Symposium for Interdisciplinary Statistical Sciences (MISSISS) (Best Statistics Graduate Student Poster). University of Michigan, Ann Arbor, MI.

43. Wagner, B.,* Rabbi, M.,* et al. (March, 2017). Engagement interventions in mobile health. Michigan Student Symposium for Interdisciplinary Statistical Sciences (MISSISS). University of Michigan, Ann Arbor, MI.
44. **Nahum-Shani, I.**, & Bamberger, P.A. (August, 2015). A lingering ambiance: Pre-retirement work context and the impact of retirement on drinking behavior (best paper). Presented at the Academy of Management Meeting, Vancouver, Canada.
45. Dworak, P., **Nahum-Shani, I.**, & Chang, W. (May, 2015). Evaluating sequence of responsive design interventions on the Health and Retirement Study using the Sequential Multiple Assignment Randomized Trial (SMART). Paper presented at the American Association for Public Opinion Research; Hollywood, Florida.
46. Spring, B., Pellegrini, C.A., & **Nahum-Shani, I.** (November, 2014). How long does it take to identify non-responders to weight loss treatment. The Obesity Society's Annual Meeting; Boston, Massachusetts.
47. **Nahum-Shani, I.**, Bamberger, P.A., Bacharach, S.B., & Doveh, E. (May, 2013). Explaining the varying effects of retirement on Alcohol Consumption: The Role of unit-level drinking norms and stress climate. Presented as part of the symposium on work transitions and mental health throughout the work life course. Work, Stress, and Health Meeting: Protecting and Promoting Total Worker Health; Los Angeles, CA.
48. **Nahum-Shani, I.**, Henderson, M.M., Lim, S., & Vinokur, A.D. (August, 2013). Supervisor support: Does it buffer or exacerbate the adverse effect of supervisor undermining. Paper presented at the Academy of Management Annual Meeting; Orlando, FL.
49. **Nahum-Shani, I.**, & Bamberger, P.A., Bacharach, S.B., & Doveh, E. (August, 2012). Explaining the varying effects of retirement on alcohol consumption: The Role of unit-level drinking norms and stress climate. Paper presented at the Academy of Management Annual Meeting; Boston, MA.
50. Dziak, J., **Nahum-Shani, I.**, & Collins, L. (May, 2012). Multilevel factorial experiments: Power and conceptual considerations. Paper presented at the Society for Prevention Research 20th Annual Meeting; Washington, DC.
51. **Nahum-Shani, I.** (August, 2011). Adaptive interventions utilizing mobile health technologies. Whitepaper accepted to the mHealth Evidence Workshop, sponsored by Robert Wood Johnson Foundation, the National Institutes of Health; Bethesda, MD.
52. **Nahum-Shani, I.**, & Somech, A. (August, 2010). Leadership, OCB and individual differences: idiocentrism and allocentrism as moderators. Paper presented at the Academy of Management Annual Meeting; Montreal, Canada.
53. **Nahum-Shani, I.**, Qian, M., Pelham, W.E., Gnagy, B., Fabiano, G., Waxmonsky, J., Yu, J., & Murphy, S.A. (May, 2010). Q-Learning: A Data analysis method for constructing adaptive interventions. Paper presented at the Society for Prevention Research Annual Meeting; Denver, CO.
54. **Nahum-Shani, I.**, & Bamberger, P.A. (August, 2009). Work hours, retirement and supportive relations among older adults. Paper presented at the Academy of Management Annual Meeting; Chicago, IL.
55. **Nahum-Shani, I.** (August, 2008). Dissertation Award winners session: Invited talk at the HR Doctoral Consortium, Academy of Management Annual Meeting; Anaheim, CA.

56. **Nahum-Shani, I.** (August, 2008). Hours worked and their positioning during the day: Effects on support availability from work, family and non-work friends. Invited talk, HR Dissertation award winners' paper session. Academy of Management Annual Meeting; Anaheim, CA.
57. **Nahum-Shani, I., & Bamberger, P.A.** (August, 2008). Temporal workplace demands and the buffering effect of social support: The Conditioning role of perceived reciprocity patterns. Paper presented at the Academy of Management Annual Meeting; Anaheim, CA.
58. Bacharach, S.B., Bamberger, P.A., & **Nahum-Shani, I.** (August, 2007). Hours, shifts and supportive relations: Resource mobilization and the link between temporal workplace demands and social support. Paper presented at the Academy of Management Annual Meeting; Philadelphia, PA.
59. **Nahum-Shani, I., Doveh, E., Bamberger, P.A., & Bacharach, S.B.** (January, 2007). Moderated mediation in multilevel models: The case of involvement in traumatic events. Poster presentation at the 4th conference of the EMR - International Biometric Society; Israel.

INVITED PRESENTATIONS/TRAINING SESSIONS

1. On Different Kinds of Adaptive Interventions: And Experimental Designs to Optimize Them. Center for Healthy Minds. University of Wisconsin-Madison; May 2024.
2. On Different Kinds of Adaptive Interventions: And Experimental Designs to Optimize Them. Center for Advancement and Dissemination of Intervention Optimization. School of Global Public Health, New York University; April 2024.
3. On Different Kinds of Adaptive Interventions: And Experimental Designs to Optimize Them. World Bank: Poverty and Equity Global Practice; April 2024.
4. Novel Methods for Optimizing the Tailoring of Cancer Control Interventions. National Cancer Institute—Shady Grove Campus. Rockville, MD; February 2024.
5. Optimizing the Integration Between Digital and Human-Delivered Components: The Hybrid Experimental Design. Stanford Mental Health Technology and Innovation Hub, Stanford University; January, 2024.
6. Optimizing an Adaptive Digital Oral Health Intervention for Promoting Oral Self-Care Behaviors. Proctor and Gamble Research Center; January 2024.
7. Optimizing the Integration Between Digital and Human-Delivered Components: The Hybrid Experimental Design. InCHIP Lecture Series, University of Connecticut; January 2024.
8. Optimizing the Integration Between Digital and Human-Delivered Components: The Hybrid Experimental Design. Feinberg School of Medicine, Northwestern University; January 2024.
9. Optimizing the Integration Between Digital and Human-Delivered Components: The Hybrid Experimental Design. Seminar at the College of Medicine, Florida State University; December 2023.
10. Optimizing the Integration Between Digital and Human-Delivered Components: The Hybrid Experimental Design. Mini-Conference on Enhancing Causal Inference in Innovative Trial Designs. Department of Psychology, University of South Carolina; December 2024.
11. Optimizing the Integration Between Digital and Human-Delivered Components: The Hybrid Experimental Design. Ground Rounds Presentation. Department of Psychiatry, Stanford University; December 2024.

12. Addressing Barriers to Mobile Health Research. Mobile Technologies in Health Research Symposium. University of Michigan. Ann Arbor, MI; November 2023.
13. Hybrid Experimental Designs for Optimizing Interventions at Varying Timescales. International Society for the Measurement of Physical Behavior; October 2023.
14. Optimizing the Adaptation and Personalization of SUD Services: Innovations in Intervention and Experimental Designs. Pre-Conference Workshop. Addiction Health Services Research (AHSR) Conference. New York, NY; October 2023.
15. Optimizing the Integration Between Digital and Human-Delivered Components: The Hybrid Experimental Design. R3EDI: Rigorous, Rapid and Relevant Evidence Adaptation and Implementation to Ending the HIV Epidemic Webinar Series. School of Public Health, Yale University; September 2023.
16. Leveraging Digital Technology to Improve Employee Health and Well-Being: Innovations in Intervention Design and Experimentation. Disney Data & Analytics Conference (DDCA). Orlando, FL; August 2023.
17. Optimizing Adaptive Interventions. 23rd Annual Summer Institute on Randomized Behavioral Clinical Trials. Potomac, MD; July 2023.
18. Optimizing the Integration Between Digital and Human-Delivered Components: The Hybrid Experimental Design (Key Note). Mobile Interventions Workshop. Bad Homburg, Germany; July 2023.
19. Optimizing the Integration Between Digital and Human-Delivered Components: Novel Experimental Approaches. The Orbit Training Institute. Florida State University College of Medicine; June 2023.
20. Innovations in Methods for Adapting and Personalizing Interventions for Cancer Control. Educational Session (Chair and Presenter): The Annual Meeting of the American Association for Cancer Research (AACR), Orlando, FL; April 2023.
21. On SMARTs and MRTs. In 'Who Moved My Cheese?': Adapting to Adaptive and Contemporary Clinical Trial Designs. Training Session: Training Researchers to Advance Inclusion Networks (TRAIN); The Strategically Focused Research Network (SFRN) on the Science of Diversity in Clinical Trials; April 2023.
22. Multimodal and Multilevel Adaptive Interventions: Innovations in Intervention and Experimental Design (with Daniel Almirall). NIH/NIA Roybal Centers for Translational Research Annual Meeting. Bethesda, MD; March 2023.
23. Hybrid Experimental Designs for Intervention Development. NIH/NHLBI Office of Biostatistics Research; February 2023.
24. Hybrid Experimental Designs for Intervention Development. Department of Psychology, University of Texas-Austin. Austin, TX; February 2023.
25. Novel Use of mHealth Data to Identify States of Vulnerability & Receptivity to JITAIs (Presented by Cho Lam). NIH Behavioral and Social Science Research Coordinating Committee (BSSR-CC) Meeting; February 2023.
26. MAPS Center: Methodologies for Adapting and Personalizing Prevention, Treatment, and Recovery Services for SUD and HIV. NIDA Addiction Services Research Centers Meeting: Providing Resources to the Field; January 2023.

27. Multimodal and Multilevel Adaptive Interventions: Innovations in Intervention and Experimental Design (with Daniel Almirall). The Center for Technology and Behavioral Health. Geisel School of Medicine, Dartmouth College; December 2022.
28. Hybrid Experimental Designs for Intervention Development. The George H. W. Bush Foundation for U.S.-China Relations; November 2022.
29. On SMARTs and MRTs. In: Who Moved my Cheese? Adapting to Adaptive and Contemporary Clinical Trial Designs. American Heart Association Research Leaders Academy Meeting. San Diego, CA; September 2022.
30. MCMTC: A pragmatic framework for selecting an experimental design to inform the development of digital interventions. mHealth Training Institute, University of California, Los Angeles; July 2021 (Virtual).
31. Mobile Intervention Design to Improve Health Outcomes (Discussant). NIH Digital Health Intervention workshop. July 2022 (Virtual).
32. Experimental Designs for Constructing Behavioral Interventions. NIH/NIMH Child Intervention, Prevention, and Services (CHIPS) Research Training Institute, University of California, Los Angeles; May 2022 (Virtual).
33. Introduction to the Data-Science for Dynamic Decision-Making Center. Injury Prevention Center Internal Advisory Committee Meeting. University of Michigan. March 2022 (Virtual).
34. Multimodal Adaptive Interventions (MADIs). Adaptive Interventions Workshop: Methods for Adaptive and Personalizing Prevention, Treatment, and Recovery Services for SUD. Addiction Health Services Research Conference. October 2021 (Virtual).
35. Multi-Component Interventions: An Organizing Framework for Selecting an Experimental Design. NIH Workshop on Methodological Approaches for Whole Person Research. September 2021 (Virtual)
36. Experimental Designs for Constructing mHealth Interventions. mHealth Training Institute, University of California, Los Angeles; July 2021 (Virtual).
37. Introduction to Just-In-Time Adaptive interventions. PhD-level intervention class. Silver School of Social Work. NYU. May 2021 (Virtual).
38. Mobile Assistance for Regulating Smoking (MARS). mPower: NIH and NSF staff meeting on mobile health. March 2021 (Virtual).
39. Panel on Measurement Advances for Mechanisms of Behavior Change (co-chair). Ten Years of the Science of Behavior Change Common Fund Program Celebrating Accomplishments and Looking to the Future. NIH Science of Behavior Change. February 2021 (Virtual).
40. Just-In-Time Adaptive Interventions in Cancer Control. NCI interdisciplinary T32 training program in cancer care delivery research at the University of Michigan. February 2021 (Virtual).
41. Experimental Designs for Developing Multi-Component Interventions: On Factorial Designs, SMARTs and MRTs. Michigan Integrated Center for Health Analytics and Medical Prediction. December 2020 (Virtual).
42. Experimental Designs for Developing Multi Component Interventions: On Factorial Designs, SMARTs and MRTs. Department of Psychology, Princeton; November 2020 (Virtual).
43. MARS: Mobile Assistance for Regulating Smoking. NIH/OBSSR Intensive Longitudinal Health Behavior Network (ILHBN) Annual Meeting; November 2020 (Virtual).

44. Insights from the Engagement Working Group. (with Donna Spruijt-Metz). NIH/OBSSR Intensive Longitudinal Health Behavior Network (ILHBN) Annual Meeting; November 2020 (Virtual).
45. Experimental Designs for Developing Technology-Based Interventions: On Factorial Designs, SMARTs and MRTs. International Society for Traumatic Stress Studies. November 2020 (Virtual).
46. Translating Theoretically-Grounded Engagement Strategies into mHealth Setting: The Substance Abuse Research Assistant (SARA) Study. Maintaining Engagement with mHealth Technology: A Transdisciplinary Virtual Seminar; University of Southern California. October 2020 (Virtual).
47. Experimental Designs for Optimizing mHealth Interventions: On Factorial Designs, SMARTs and MRTs. Department of Psychiatry and Behavioral Sciences. University of Washington. Seattle, WA; December 2019.
48. Engagement in Intensive Longitudinal Data Collection. Panel on Intensive Longitudinal Assessment of Health and Behavior. Technology in Psychiatry Summit. Harvard University. Boston, MA; October 2019.
49. Engagement in Intensive Longitudinal Data Collection. NIH/OBSSR Intensive Longitudinal Health Behavior Network Annual Meeting. Harvard University. Boston, MA; October 2019.
50. Mentoring Graduate Students: Tips, Best Practices, and Life-Changing Stories from the Experts. Professional Development Workshop. Academy of Management Annual Meeting. Boston, MA; August 2019.
51. Experimental Designs for Constructing mHealth Interventions. mHealth Training Institute, University of California, Los Angeles; July 2019.
52. Just-In-Time Adaptive Interventions: Scientific Motivation and Key Components. Invited Symposia on mHealth in Action. Society for Prevention Research Annual Meeting. San Francisco, CA; May 2019.
53. Engagement and Health Behavior Change: The Role of Adaptive and Just-In-Time Adaptive Interventions. Clinical Science Forum: New Developments in the Clinical Science of Behavior Change. Association for Psychological Science Annual Convention. Washington, DC; May 2019.
54. Engagement in Mobile Health Studies (with Donna Spruijt-Metz and David Wetter). The Intensive Longitudinal Health Behavior Network (ILHBN). Online; February 2019.
55. From Adaptive to Just-In-Time Adaptive Interventions in Mobile Health. Department of Psychology, University of Michigan; February 2019.
56. From Adaptive to Just-In-Time Adaptive Interventions in Mobile Health. Department of Psychology, University of Zurich; December 2018.
57. Novel Use of mHealth Data to Identify States of Vulnerability and Opportunity to JITAI. NIH Intensive Longitudinal Health Behaviors Network Annual Meeting. Bethesda, MD; October 2018.
58. Experimental Designs for Building mHealth Interventions: Factorial Designs, SMARTs and MRTs. mHealth Training Institute, University of California, Los Angeles; August 2018.
59. Addressing Human Variability: Adaptive and Just-In-Time Adaptive Interventions. The Human Variability Project Workshop. Army Research Lab. Baltimore, MD; July 2018.

60. Micro-Randomized Trial to Investigate the Effects of Just-In-Time Prompts and Message Framing. The Micro-Randomized Trial Design for developing adaptive mobile health; invited session at the Society for Clinical Trials meeting. Portland, OR; May 2018.
61. From Adaptive to Just-In-Time Adaptive Interventions in Mobile Health. Huntsman Cancer Institute, University of Utah. Salt Lake City, Utah; May 2018.
62. Lightning Rounds on Just-In-Time Adaptive Interventions. Society for Behavioral Medicine Annual Meeting. New Orleans, LA; April 2018.
63. From Adaptive Interventions to Just-in-Time Adaptive Interventions (Dempsey [Speaker] & Nahum-Shani). Pre-Conference workshop on “The Nuts and Bolts of Behavioral Intervention Development” at the Society for Behavioral Medicine Annual Meeting, New Orleans, LA; April 2018.
64. Novel Experimental Approaches to Designing Effective Multi-Component Interventions. Invited Pre-Conference workshop at the Society for Behavioral Medicine Annual Meeting; New Orleans, LA; April 2018.
65. Using Digital Data to Promote Behavior Change. Symposium on Consumer Goods as Agents of Sustainable Health. Proctor and Gamble Mason Research Center. Cincinnati, OH; March 2018.
66. Experimental Designs for Multi-Components Behavioral Intervention Development. Implementation Research Group; The Center for Evaluation and Implementation Resources. US Department of Veterans Affairs; Online Session; January 2018.
67. From Adaptive to Just-In-Time Adaptive Interventions in Mobile Health. Michigan Program in Survey Methodology (MPSM) Sponsors Briefing. University of Michigan. Ann Arbor, MI; October 2017.
68. Novel Longitudinal Methods for SMART Studies of Drug Use and HIV. The Methodology Center Annual Retreat. Penn State University. State College, PA; October 2017.
69. From Adaptive to Just-In-Time Adaptive Interventions in Mobile Health: Conceptual and Methodological Considerations. Department of Psychiatry and Behavioral Sciences, University of Washington. Seattle, WA; September, 2017.
70. Experimental Designs for Building mHealth Interventions: Factorial Designs, SMARTs and MRTs. mHealth Training Institute, University of California, Los Angeles; August 2017.
71. Experimental Designs for Constructing Multi-Component Behavioral Interventions. NIA/NIH Workshop on Innovating the Next Generation of Dementia and Alzheimer’s Disease Care Interventions: Addressing the needs of caregivers, care providers, and persons living with dementia. National Institutes of Health, Rockville, MD; July 2017.
72. From Adaptive to Just-In-Time Adaptive Interventions in Mobile Health: Conceptual and Methodological Considerations. Department of Biomedical Data Science, Geisel School of Medicine, Dartmouth College. Lebanon, NH; July 2017.
73. Introduction to Adaptive Interventions and SMART studies. Novel Experimental Approaches to Designing Effective Multi-component Interventions. Invited Workshop; The Chicago Chapter of the American Statistical Association (ASA). Northwestern University, Chicago, IL; May, 2017.
74. From Adaptive to Just-In-Time Adaptive Interventions in Mobile Health: Conceptual and Methodological Considerations. Center for Drug Use and HIV Research (CDUHR) mHealth Mini Conference. NYU, New York, NY; April 2017.

75. From Adaptive to Just-In-Time Adaptive Interventions in Mobile Health. Department of Psychiatry & Neurobehavioral Sciences, School of Medicine, University of Virginia, Charlottesville, VA; December 2016.
76. Introduction to Adaptive Interventions. IES Principal Investigator's Conference. Washington, DC; December 2016.
77. From Adaptive to Just-In-Time Adaptive Interventions. Institute for Translational Research in Children's Mental Health 2nd Annual Symposium: Building a Science of Personalized Intervention for Children's Mental Health. University of Minnesota, Minneapolis, MN; October 2016.
78. Experimental Designs and Data Analytic Methods for Building mHealth Interventions. mHealth Training Institute, University of California, Los Angeles; August 2016.
79. Experimental Designs for Building mHealth Interventions. NIH Global mHealth Research Training Institute. Bethesda, MD; June 2016.
80. Just in Time Adaptive Interventions: Scientific Motivation and Key Components. Invited talk at the Cross-Cutting Theme Program: Breaking Free—Intersecting Perspectives on the Science of Behavior Change. Association for Psychological Science Convention, Chicago, IL; May 2016.
81. From Adaptive to Just-In-Time Adaptive Interventions. Workshop on Methodological Approaches to Designing Adaptive Interventions in Mobile Health; Association for Psychological Science Convention, Chicago, IL; May 2016.
82. Building Just-In-Time Adaptive Interventions in Mobile Health: The Role of Micro-Randomized Trials (Organizer and Speaker). Pre-Conference workshop at the Society for Behavioral Medicine Annual Meeting, Washington, DC; March 2016.
83. From Adaptive Interventions to Just-in-Time Adaptive Interventions (Dempsey [Speaker] & Nahum-Shani). Pre-Conference workshop on 'The Nuts and Bolts of Behavioral Intervention Development' at the Society for Behavioral Medicine Annual Meeting, Washington, DC; March 2016.
84. Adaptive Interventions for Health Behavior Change: What, Why and How? Center for Economic and Social Research, University of Southern California. Los Angeles, CA; Feb, 2016.
85. On Adaptive Interventions and SMARTs. School of Nursing Methodology Series Workshop, University of Michigan, Ann Arbor, MI; Feb 2016.
86. Adaptive Interventions for Health Behavior Change: What, Why and How? Department of Psychology, Rice University. Houston, TX; December 2015.
87. Adaptive Interventions in Educational Research. IES Principal Investigator's Conference. Washington, DC; December 2015.
88. Just In Time Adaptive Interventions for Promoting Mental Health Among College Students (White Paper). NSF Workshop on College Student Health. Chicago, IL; July 2015.
89. Introduction to Adaptive Intervention and Associated Methodologies. IES Technical Working Group Meeting on SMARTs in Education Research. Washington DC; July 2015.
90. Getting SMART: Experimental Design Methods for Developing Adaptive Interventions. Pre-conference workshop; annual Meeting of the Society for Prevention Research, Washington, DC, May 2015.

91. Getting SMART: Experimental Design and Analysis Methods for Developing Adaptive Interventions; 1-Day Workshop at the UCSF Division of Prevention Sciences & Department of Epidemiology & Biostatistics, University of California, San Francisco; May 2015.
92. mHealth Research Methodology. mHealth Training / NIH mHealth Summit 2014. Washington DC; December 2014.
93. On SMART and Factorial Designs: Application to mHealth Research. mHealth evidence wireless workshop; Wireless Health 2014. Bethesda, MD; October 2014.
94. On SMART and Factorial Designs: Application to mHealth Research. mHealth evidence NIH/OBSSR Panel. Bethesda, MD; October 2014.
95. Experimental Designs for Developing mHealth Interventions. NIH/OBSSR online mHealth training. July 2014.
96. Pre-Meeting Conference Workshop on the Design and Conduct of Sequential Multiple Assignment Randomized Trials. Society for Clinical Trials Meeting. Philadelphia, PA; May 2014.
97. From SMART to Just in Time Adaptive Interventions. NIH Workshop on Innovative Study Designs and Methods for Developing, Testing and Implementing Behavioral Interventions. Bethesda, MD, April 2014.
98. mHealth Research Methods and Design. Instructor in NIH/OBSSR brief mHealth training (online). Bethesda, MD, March 2013.
99. mHealth Research Methods and Design. Instructor in NIH/OBSSR mHealth training. Bethesda, MD, Dec 2013.
100. On MOST, SMART and Factorial Designs. Center for Technology and Behavioral Health, Department of Psychiatry, Geisel School of Medicine at Dartmouth, Dartmouth College, November 2013.
101. On MOST, SMART and Factorial Designs. The National Institute on Drug Abuse's Division of Clinical Neuroscience & Behavioral Research (DCNBR): Meeting on Overcoming Barriers and Making Adolescent Drug Abuse Treatment More Community, Bethesda, MD, June 2013.
102. Being SMART about Adapting Interventions: An Introduction to Adaptive Interventions and SMART designs; Pre-conference workshop on Tobacco Use Treatment Development: Challenges, Opportunities, & New Methods, Society for Research on Nicotine and Tobacco's 19th Annual Meeting, March 2013.
103. Designing Work-Based Brief Interventions for At-Risk Drinking: The SMART Way. Research project presented at the Stanford Prevention Research Center, Stanford University School of Medicine, Stanford, CA; February 2013.
104. Supervisor Support: Does it Buffer or Exacerbate the Adverse Effects of Supervisor Undermining? Seminar presented at the Department of Psychology, Virginia Tech; January, 2013.
105. Optimizing Technology-Based Interventions: The SMART Experimental Approach. Seminar presented at the Stanford Prevention Research Center, Stanford University School of Medicine, Stanford, CA; January 2013.
106. Q-learning: A Data Analysis Method for Developing Behavioral Interventions. Seminar presented at the Department of Psychology, University of North Carolina at Chapel Hill, Chapel Hill, NC; December 2012.

107. MHealth Research and Experimental Designs: Beyond Randomized Control Trials. Training session at the NIH/mHealth 2012 training workshop, Washington DC; November 2012.
108. Supervisor Support: Does it Buffer or Exacerbate the Adverse Effects of Supervisor Undermining? Paper presented at Ross School of Business, University of Michigan, Ann Arbor MI; November 2012.
109. Experimental Designs for Intervention Development. National Strategic Summit on creating a roadmap for physical activity, lifestyle and comparative effectiveness research. Arizona State University, Phoenix, AZ, October 2012.
110. Experimental Designs for Intervention Development. NIH SOBC Revisiting Pasteur's Quadrant: Use-Inspired Basic Research, Bethesda, MD, October 2012.
111. Supervisor Support: Does it Buffer or Exacerbate the Adverse Effect of Supervisor Undermining. Paper presented at the Department of Psychology, area of Personality & Social Context seminar, University of Michigan, April 2012.

FORMAL TEACHING/WORKSHOPS

- | | |
|------|---|
| 2024 | <p><i>The Comprehensive Program for Adaptive Interventions Training in Education (CATIE)</i>
 Training institute at the Data Science for Dynamic Decision-Making Center (d3c) University of Michigan, February 2024</p> |
| 2023 | <p><i>Introduction to Adaptive Interventions and Just-In-Time Adaptive Interventions</i>
 Workshop at the College of Nursing
 University of South Carolina, December 2023</p> <p><i>Adaptive Interventions for Substance Use and HIV: Advances in Intervention Delivery Frameworks and Experimental Designs</i>
 Workshop at the Center for AIDS Prevention Studies
 University of California San Francisco, October 2023</p> <p><i>The Comprehensive Program for Adaptive Interventions Training in Education (CATIE)</i>
 Training institute at the Data Science for Dynamic Decision-Making Center (d3c) University of Michigan, March 2023</p> |
| 2022 | <p><i>Introduction to Adaptive Interventions and SMARTs</i>
 Workshop to T32 trainees in cancer research and addiction,
 at the University of Utah and the University of Michigan.
 January 2022</p> <p><i>Optimizing Digital Interventions: The MOST Way</i>
 Pre-Conference Workshop
 International Society for Research on Internet Interventions Annual Meeting
 Pittsburgh, PA, September 2022</p> |
| 2021 | <p><i>Getting SMART about Adaptive Interventions in Education</i>
 Training institute at the Data Science for Dynamic Decision-Making Center (d3c)</p> |

- University of Michigan.
November 2021
- 2019 ***Experimental Designs for Mobile Health (mHealth) Interventions***
Workshop at the College of Nursing and Health Innovation
Arizona State University, February 2019
- Introduction to Adaptive Interventions and SMARTs***
Workshop at the College of Nursing
University of South Carolina, November 2019
- Getting SMART about Adaptive Interventions in Education***
Training institute at the Data Science for Dynamic Decision-Making Lab (d3lab)
University of Michigan, March 2019
- 2018 ***Introduction to Adaptive and Just-In-Time Adaptive Interventions in Mobile Health: Conceptual and Methodological Considerations***
Workshop at the Department of Psychology
University of Zurich, December 2018
- 2014 ***Summer Institute on Innovative Methods***
Experimental Design and Analysis Methods for Developing Adaptive Interventions:
Getting SMART
Funded by NIH/NIDA
University of Michigan, June 2014
- 2013 ***Quantitative Methodology Program Seminar***
Survey Research Center, Institute for Social Research
University of Michigan, 2013
- Methods for Just In Time Adaptive Interventions***
Workshop funded by SRC/ISR, NIH/NIDA, Mcubed
University of Michigan, August 2013
- 2011-2012 ***Advanced Regression Analysis***
The international summer workshop series in advanced research methods
Tel Aviv University, Israel
- 2008 ***Multivariate Analysis***
Faculty Supervisor: Prof. Ayala Cohen
Department of Industrial Engineering and Management
Technion, Israel Institute of Technology
- 2007 ***Statistics for Managers (MBA Program).***
Department of Industrial Engineering and Management
Technion, Israel Institute of Technology
- 2006 ***Leadership and Organizations,*** Guest Instructor
School of Education, Haifa University, Israel

SERVICE

- Editorial Board:**
- Academy of Management Discoveries (2015-Present)
 - Guest Editor, *Frontiers in Digital Health*, Research Topic: Digital Technology for Tobacco Control (2021-2022)
- Advisory Board:**
- Center for Technology and Behavioral Health; Dartmouth (2015-present)
 - Northeast Node of the National Drug Abuse Treatment Clinical Trials Network (2015-present)
 - DSMB: Enhancing Engagement with Digital Mental Health (R01 MH125179; 2021)
 - Methodology advisor, NIH/FNIH initiative: Developing Evidence-Based Music Therapies for Brain Disorders of Aging (2021)
 - Organizer: NIH/NIA Workshop on Leveraging Technology-based Adaptive Interventions to Reduce the Risk for AD/ADRD
- Leadership:**
- Chair, Search Committee for a Research Professor (open rank), Survey Research Center (SRC), Institute for Social Research (2018)
 - Chair (elected), NIH/OBSSR Intensive Longitudinal Health Behavior Network (2020-2021)
 - Co-Lead, Institute for Social Research, SRC's COVID-19 Task Force (2021-2022)
- Promotion Review:**
- Medical School, University of Virginia: Assistant Professor to Associate Professor
 - School of Nursing, University of Nevada: Assistant Professor to Associate Professor
 - School of Public Health, Johns Hopkins University: Assistant Professor to Associate Professor
 - Medical School, Brown University: Assistant Professor to Associate Professor
 - Population Health Sciences Department, University of Utah: Associate Professor to Professor
- Journal Reviewer:**
- *Annals of Behavioral Medicine*
 - *Behavior Research Methods*
 - *Biometrics*
 - *Clinical Child and Family Psychology Review*
 - *Clinical Trials*
 - *Clinical Psychology: Science and Practice*
 - *Contemporary Clinical Trials*
 - *Health Psychology*
 - *Health Psychology Review*
 - *Human Relations*
 - *Industrial Relations*
 - *Journal of Applied Psychology*
 - *Journal of Health and Social Behavior*
 - *Journal of Medical Internet Research*

- *Journal of Occupational Health Psychology*
- *Journal of Organizational Behavior*
- *Journal of Organizational and Occupational Psychology*
- *Journal of the American Statistical Association*
- *Perspectives in Psychological Science*
- *Psychology of Addictive Behaviors*
- *Psychological Methods*

Conference Reviewer - Society for Behavioral Medicine 2023 Annual Meeting

Grant Application Reviewer:

- Ministry of Science, Technology and Space, Israel (2016)
- Swiss National Science Foundation (2016)
- National Institutes of Health: NIDA Avant-Garde Award Program for HIV/AIDS and Drug Use Research (2018)
- ETH Zurich Research Commission: Mobile Digital Health (2019)
- National Institutes of Health: Risk, Prevention and Health Behavior Integrated Review Group (2020)
- Center for Technology and Behavioral Health (CTBH); Dartmouth College (2017-2020)
- National Institutes of Health: NIMH Review Panel— Clinical Trials to Test the Effectiveness of Treatment, Preventive, and Services Interventions (2021)
- National Institutes of Health: NHLBI Review Panel—Early Intervention to Promote Cardiovascular Health of Mothers and Children (ENRICH) Multisite Resource and Coordinating Center (2021)
- Israel Science Foundation (2022)
- The Wellcome Trust charitable foundation: Early-Career Award (2022)
- National Institutes of Health: NIDA HEAL Initiative Review Panel (2022)
- National Institutes of Health: NCCIH Training and Education Review Panel (2022)
- National Institutes of Health: NIDA Centers (P30 P50) Study Section (2023)
- National Institutes of Health: NIDA Panel on Ending the HIV Epidemic: Justice-Involved Populations (2023)
- Institute of Education Sciences: Social and Behavioral Two Peer Review Panel (2024)
- National Institutes of Health: NIA Clinical Trials Review Panel (2024)
- National Institutes of Health: NIDA Reaching Equity at the Intersection of HIV and Substance Use Review Panel (2024)

Consulting/Mentorship on Funded Projects:

- NIH/NIMH R01 MH113722 (PI: Meffert)
- NIH/NINR R01 NR017635 (PI: Buchholz)
- NIH/NIC R01 CA225877 (PIs: Cadmusbertram, Phillips)
- NIH/NIAAA K01 AA024500 (PI: Tiura)
- NIH/NIMH K23 MH113776 (PI: Czyz)

- NIH/NIDA R34 DA046367 (PI: Carrico)
- NIH/NHLBI R01 HL132578 (PI: Levine)
- NIH/NIMH K23 MH122504 (PI: Buck)
- NIH/NIAAA K23 AA028232 (PI: Coughlin)
- NIH/NIDA K23 DA048181 (PI: Watson)
- NIH/NIDDK R01 DK124428 (PI: Stanger)
- NIH/NCI K99 CA252604 (PI: Potter)
- NIH/NIAAA T32AA007477 (PI: Blow)
- NIH/NCI T32 CA236621 (PI: Frieze)
- NIH/NIMH P30 MH062294-19S2 (PI: Spiegelman)
- NIH/NIMH F31 MH122101 (PI: Hong)
- DoD PR203509, W81XWH-20-PRMRP-CTA (PI: Garland)
- NIH/NCCIH K23AT010879 (PI: Goldberg)
- NIH/NIAAA K23AA030602 (PI: Marks)
- NIH/NIDDK K23DK134764 (PI: Berinstein)
- NIH/NIMH K23MH136332 (PI: Cancelliere)