

**Ross Jacobucci**  
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**Curriculum Vitae**  
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## Professional History & Education

- **Assistant Professor of Psychology** 2017 - Current  
*University of Notre Dame* Notre Dame, Indiana
- **Ph.D. Psychology** August 2017  
*University of Southern California (USC)* Los Angeles, California  
– Area: Quantitative Methods
- **M.A. Psychology** 2011-2013  
*University of Northern Iowa (UNI)* Cedar Falls, Iowa  
– Individualized Study: Quantitative Emphasis
- **B.A. Psychology** June 2010  
*Luther College* Decorah, Iowa

## Research Funding

### • Ongoing

**NIH R21 MH129688-01** 3/4/22-2/29/24  
Brooke Ammerman (MPI) & Ross Jacobucci (MPI)  
*Advancing Real-Time Suicide Risk Detection Through the Digital Phenotyping Smartphone Application Screenomics*  
Total Costs: \$430,375

**NIH R21 MH131978-01** 12/12/22-11/30/24  
Ross Jacobucci (MPI) & Brooke Ammerman (MPI)  
*Improving Momentary Suicide Risk Identification Through Adaptive Time Sampling*  
Total Costs: \$430,375

**NIH R01 OD03336-01** 7/1/2022-6/30/2027  
Theodore Beauchaine (PI)  
Role: Co-Investigator  
*Leveraging Noninvasive Transcutaneous Vagus Nerve Stimulation and Smartphone Technology to Reduce Suicidal Behaviors and Suicide Among Highly Vulnerable Adolescents*  
Total Direct: \$ 2,995,095

**DARPA STRENGTHEN** 10/1/23-3/31/26  
Davidson (Co-PI) & Tononi (Co-PI)  
Role: Co-Investigator  
*Hybrid interventions to cultivate well-being: mental exercise, physical exercise and transcranial electrical stimulation with temporal interference*  
Total Costs: \$14,163,731.00

### • Completed

**NIH AIM-AHEAD Pilot Program** 9/1/2022-9/1/2023  
Allen Tien (PI)  
Role: Consultant  
*Establishing student project capabilities to improve suicide prevention (PROTECT): Rich data access, ML algorithm optimization, translation to practice (Model C)*  
Total Direct: \$ 495,000

Ross Jacobucci (PI) 7/1/19 - 6/30/21  
Loan Repayment Programs (Clinical)  
**National Institutes of Mental Health**  
*Integrative Data Analysis for Increasing the Prediction of Suicide*

Ross Jacobucci (PI) 1/1/20-12/31/20  
**Notre Dame Faculty Initiation Grant.**  
*Dynamic Multimodal Assessment of Suicide Risk: An Initial Application.*  
Total Direct: \$9,930

Ross Jacobucci (Co-PI) & Brooke Ammerman (Co-PI) 8/13/18 - 8/13/20  
**Advanced Diagnostics and Therapeutics Discovery Fund.**  
*Using Integrative Data Mining to Improve the Prediction of Suicide: An Initial Application.*  
Total Direct: \$41,068

T32 AG000037-38 Crimmins (PI) 01/01/15-07/31/17  
**Sponsored: Ruth L. Kirschstein National Research Service Award (T32).**  
*Predoctoral trainee on the Multidisciplinary Research Training in Gerontology Grant at USC.*  
Role: Predoctoral Trainee

## Awards/Honors

**2023 Early Career Research Award**  
Society of Multivariate Experimental Psychology.

**2021 APS Rising Star**  
Association for Psychological Science.

**2021 Elected Member**  
Society of Multivariate Experimental Psychology.

**2019 Anastasi Dissertation Award**  
Division 5, American Psychological Association

**Academic All-American**, Golf, 2009, 2010

## Books

Jacobucci, R., Grimm, K. J., & Zhang, Z. (2023). *Machine learning for social and behavioral research*. New York, NY: Guilford.

## Publications

\* refers to undergraduate students, @ graduate advisees (@<sub>1</sub> for graduate advisees that I was not the primary mentor), and (+) for postdocs.

### • Peer Reviewed Publications

57. @McClure, K., Ammerman, B., & **Jacobucci, R.** (in press). Are Items More Than Indicators? An examination of psychometric homogeneity, item-specific effects, and consequences for structural equation models. *Multivariate Behavioral Research*.
56. @Wilcox, K. T., **Jacobucci, R.**, @<sub>1</sub>Waite, E., Dixon-Gordon, K., L., McCloskey, M.S., & Ammerman, B. A. (in press). A Text Mining Approach to Characterizing Interpersonal Stress among Individuals with a Nonsuicidal Self-Injury History. *Current Psychology*.

55. @McClure, K., @<sub>1</sub>Bell, K., **Jacobucci, R.**, & Ammerman, B.A. (in press). Measurement invariance and response consistency of single-item assessments of suicidal thoughts and behaviors. *Psychological Assessment*.
54. Ammerman, B. & **Jacobucci, R.** (in press). The impact of social connection on near-term suicidal ideation. *Psychiatry Research*.
53. **Jacobucci R.**, Ammerman B., & Ram N. (2024). Examining Passively Collected Smartphone-Based Data in the Days Prior to Psychiatric Hospitalization for a Suicidal Crisis: Comparative Case Analysis. *JMIR Formative Research*, 8:e55999. doi: 10.2196/55999
52. **Jacobucci, R.** & Ammerman, B. (2023). Examining the dynamic relationship between nonsuicidal self-injury and alcohol use experiences. *Suicide and Life-Threatening Behaviors*, 53, 1108-1116.
51. **Jacobucci, R.**, @McClure, K., & Ammerman, B. (2023). Comparing the Role of Perceived Burdensomeness and Thwarted Belongingness in Prospectively Predicting Active Suicidal Ideation. *Suicide and Life-Threatening Behaviors*, 53, 198-206.
50. @Wilcox, K. T., **Jacobucci, R.**, Zhang, Z., & Ammerman, B. A. (2023). Supervised Latent Dirichlet Allocation with Covariates: A Bayesian Structural and Measurement Model of Text and Covariates. *Psychological Methods*, 28, 1178–1206. <https://doi.org/10.1037/met0000541>.
49. Case, J.A.C., Sullivan-Toole, H., Mattoni, M., **Jacobucci, R.**, Forbes, E.E., & Olino, T.M. (2022). Evaluating the Item-Level Factor Structure of Anhedonia. *Journal of Affective Disorders*, 299, 215-222.
48. Grimm, K. J., **Jacobucci, R.**, Stegmann, G., & Serang, S. (2022). Explorations of individual change processes and their determinants: A novel approach and remaining challenges. *Multivariate Behavioral Research*, 57, 525-542.
47. **Jacobucci, R.** (2022). A Critique of Using the Labels Confirmatory and Exploratory in Modern Psychological Research. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1020770>
46. @Li, X., & **Jacobucci, R.** (2022). Regularized structural equation modeling with stability selection. *Psychological Methods*, 27, 497–518. <https://doi.org/10.1037/met0000389>
45. **Jacobucci, R.** & @Li, X. (2022). Does Minority Case Sampling Improve Performance with Imbalanced Outcomes in Psychological Research? *Journal of Behavioral Data Science*, 2(1), 1–16. DOI:<https://doi.org/10.35566/jbds/v2n1/p3>
44. Burke, T. A., @Shao, S., **Jacobucci, R.**, Kautz, M., Alloy, L. B., & Ammerman, B. A. (2022). Examining momentary associations between behavioral approach system indices and nonsuicidal self-injury urges. *Journal of Affective Disorders*, 296. 244-249.
43. Ammerman, B.A., Burke, T. A., **Jacobucci, R.**, @McClure, K., & Lui. R. T. (2021). A prospective examination of COVID-19-related social distancing practices on suicidal ideation. *Suicide and Life-Threatening Behavior*, 51, 969-977.
42. Ammerman, B. A., Burke, T. A., **Jacobucci, R.**, & @McClure, K. (2021). How we ask matters: The impact of question wording in single-item measurement of suicidal thoughts and behaviors. *Preventive Medicine*, 152, 106472.
41. Ortiz, S. N., Forrest, L. N., Kinkel-Ram, S. S., **Jacobucci, R. C.**, & Smith, A. R. (2021). Using shape and weight overvaluation to empirically differentiate severity of other specified feeding or eating disorder. *Journal of Affective Disorders*, 295, 446-452.
40. @Li, X. & **Jacobucci, R.**, & Ammerman, B. A. (2021). Tutorial on the use of the regsem package in R. *Psych*, 3. 579-593.
39. Ammerman, B.A., Burke, T.A., **Jacobucci, R.**, & @McClure, K. (2021). Preliminary investigation of the association between COVID-19 and suicidal thoughts and behaviors in the U.S. *Journal of Psychiatric Research*, 134, 32-38.
38. +Ober, T., Cheng, Y., **Jacobucci, R.**, & Whitney, B. M. (2021). Examining the within-domain factor structure of the big five inventory-2 with an adolescent sample. *Psychological Assessment*, 33, 14-28.

37. Rodgers, D. M., **Jacobucci, R.**, & Grimm, K. J. (2021). A multiple imputation approach for handling missing data in classification and regression trees. *Journal of Behavioral Data Science*, 1, 127-153..
36. Littlefield, A. K., Cooke, J. T., Bagge, C., Glenn, C., Kleiman, E. M., **Jacobucci, R.**, Millner, A. J., & Steinley, D. (2021). Machine Learning to Classify Suicidal Thoughts and Behaviors: Implementation within the Common Data Elements used by the Military Suicide Research Consortium. *Clinical Psychological Science*, 9, 467-481.
35. **Jacobucci, R.**, Littlefield, A., Millner, A. J., Kleiman, E. M., & Steinley, D. (2021). Evidence of inflated prediction performance: A commentary on machine learning and suicide research. *Clinical Psychological Science*, 9, 129-134.
34. **Jacobucci, R.**, Ammerman, B. A., & @Wilcox, K. (2021). The application of machine learning for text-based responses to improve suicide risk prediction. *Suicide and Life Threatening Behavior*, 51, 55-64.
33. **Jacobucci, R.**, Ammerman, B. A., & @Li, X. (2021). Using ordinal regression for advancing the understanding of distinct suicide outcomes. *Suicide and Life Threatening Behavior*, 51, 65-75.
32. Grimm, K. J., & **Jacobucci, R.** (2021). Reliable trees: Reliability informed recursive partitioning for psychological data. *Multivariate Behavioral Research*, 56, 595-607.
31. Serang, S., **Jacobucci, R.**, Stegmann, G., Brandmaier, A. M., Cui, D., & Grimm, K. J. (2021). Mplus Trees: Structural equation model trees using Mplus. *Structural Equation Modeling*, 28, 127-137.
30. Forrest, L., **Jacobucci, R.**, & Grilo, C. M. (2020). Empirically-Determined severity levels for binge-eating disorder outperform existing severity classification schemes. *Psychological Medicine*, 1-11.
29. Jiang, M., Ammerman, B.A., @Zeng, Q., **Jacobucci, R.**, & @Brodersen, A. (2020). Phrase-level pairwise topic modeling to uncover helpful peer responses to online suicidal crises. *Humanities & Social Sciences Communications*, 7, 1-13.
28. @Nelson, N. A., **Jacobucci, R.**, Grimm, K. J., & Zelinski, E. (2020). The Bi-directional relationship between physical health and memory. *Psychology & Aging*, 35, 1140-1153.
27. @Hong, M., **Jacobucci, R.**, & Lubke, G. (2020). Deductive Data Mining. *Psychological Methods*, 25, 691-707.
26. Ammerman, B.A., **Jacobucci, R.**, Turner, B. J., Dixon-Gordon, K., & McCloskey, M.S. (2020). Quantifying the importance of lifetime frequency versus number of methods used in the consideration of NSSI severity. *Psychology of Violence*, 10, 442-451.
25. Liang, X., & **Jacobucci, R.** (2020). Regularized Structural Equation Modeling to Detect Measurement Bias: Evaluation of Lasso, Adaptive Lasso and Elastic Net. *Structural Equation Modeling*, 27, 722-734.
24. Vargas, I., Haefel, G.J., **Jacobucci, R.**, Boyle, J.T., Mayer, S.E., & Lopez-Duran, L. (2020). Negative Cognitive Style And Cortisol Reactivity To A Laboratory Stressor: A Preliminary Study. *International Journal of Cognitive Therapy*, 13, 1-14.
23. Burke, T. A., **Jacobucci, R.**, Ammerman, B. A., & Diamond, G. (2020). Using machine learning to classify suicide attempt history among youth in medical care settings. *Journal of Affective Disorders*, 268, 206-214.
22. **Jacobucci, R.**, & Grimm, K. J. (2020). Machine learning and psychological research: The unexplored effect of measurement. *Perspectives on Psychological Science*, 15, 809-816.
21. Serang, S. & **Jacobucci, R.** (2020). Exploratory mediation analysis of dichotomous outcomes via regularization. *Multivariate Behavioral Research*, 55, 69-86.
20. @Nelson, N. A., Bergeman, C. S., & **Jacobucci, R.** (2019). Future time perspective in mid-to-later life: The role of personality. *The Journal of Gerontology: Psychological Science*, gbx110.
19. Ammerman, B. A., Hong, M., Sorgi, K. M., **Jacobucci, R.**, Park, Y., & McCloskey, M. S. (2019). An examination of individual forms of nonsuicidal self-injury. *Psychiatry Research*, 278, 268-274.

18. Burke, T.A., Ammerman, B.A., & **Jacobucci, R.** (2019). The use of machine learning in the study of suicidal and non-suicidal self-injurious thoughts and behavior: A systematic review. *Journal of Affective Disorders, 245*, 869-884.
17. **Jacobucci, R.**, Serang, S., & Grimm, K. J. (2019). A short note on complications in interpretation with the dual change score model. *Structural Equation Modeling, 26*, 924-930.
16. Ammerman, B.A., **Jacobucci, R.** & McCloskey, M.S. (2019). Re-considering important outcomes of the NSSI disorder diagnostic criterion A. *Journal of Clinical Psychology, 75*, 1084-1097.
15. **Jacobucci, R.**, Brandmaier, A., & Kievit, R. (2019). A practical guide to variable selection in structural equation models with regularized MIMIC models. *Advances in Methods and Practices in Psychological Science, 2*, 55-76.
14. Usami, S., **Jacobucci, R.**, & Hayes, T. (2019). The performance of latent growth curve model based structural equation model trees to uncover population heterogeneity in growth trajectories. *Computational Statistics, 34*, 1-22.
13. Ammerman, B. A., Serang, S., **Jacobucci, R.**, Burke, T., A., Alloy, L. B., & McCloskey, M. S. (2018). Exploratory analysis of mediators in the relationship between childhood maltreatment and suicidal behavior. *Journal of Adolescence, 69*, 103-112.
12. Stegmann, G., **Jacobucci, R.**, Serang, S., & Grimm, K. J. (2018). Recursive partitioning with nonlinear change trajectories. *Multivariate Behavioral Research, 53*, 559-570.
11. Burke, T. A., **Jacobucci, R.**, Ammerman, B. A., Piccirillo, M., McCloskey M., & Alloy, L. B. (2018). Identifying the relative importance of non-suicidal self-injury features in predicting suicidal ideation and behavior using exploratory data mining. *Psychiatry Research, 262*, 175-183.
10. Ammerman, B. A., **Jacobucci, R.**, & McCloskey, M. S. (2018). Using exploratory data mining to identify important predictors of non-suicidal self-injury frequency. *Psychology of Violence, 8*, 515-525.
9. Ammerman, B. A., **Jacobucci, R.**, Kleiman, E. M., Uyeji, L., & McCloskey, M. S. (2018). The relationship between nonsuicidal self-injury age of onset and severity of self-harm. *Suicide and Life Threatening Behavior, 48*, 31-37.
8. **Jacobucci, R.**, Grimm, K. J. (2018). Comparison of frequentist and Bayesian regularization in structural equation modeling. *Structural Equation Modeling, 25*, 639-649.
7. Stegmann, G., **Jacobucci, R.**, Harring, J., & Grimm, K. J. (2018). Nonlinear mixed-effects modeling programs in R. *Structural Equation Modeling, 25*, 160-165.
6. Serang, S., **Jacobucci, R.**, Brimhall, K. C., & Grimm, K. J. (2017). Exploratory mediation analysis via regularization. *Structural Equation Modeling, 24*. 733-744.
5. **Jacobucci, R.**, Grimm, K. J., & McArdle, J. J. (2017). A comparison of methods for uncovering sample heterogeneity: Structural equation model trees and finite mixture models. *Structural Equation Modeling, 24*. 270-282.
4. Ammerman, B. A., **Jacobucci, R.**, Kleiman, E. M., Muehlenkamp, J. J., & McCloskey, M. S. (2017). Development and validation of empirically derived frequency criteria for NSSI disorder using exploratory data mining. *Psychological Assessment, 29*, 221-231.
3. **Jacobucci, R.**, Grimm, K. J., & McArdle, J. J. (2016). Regularized structural equation modeling. *Structural Equation Modeling, 23*, 555-566. doi:10.1080/10705511.2016.1154793. PMID: 4937830
2. Hayes, T., Usami, S., **Jacobucci, R.**, & McArdle, J. J. (2015). Using classification and regression trees (CART) and random forests to analyze attrition in longitudinal data: Results from two simulation studies. *Psychology and Aging, 30*, 911-929. doi:10.1037/pag0000046. PMID: 4743660
1. Skaar, N. R., Christ, T. J., & **Jacobucci, R.** (2014). Measuring adolescent prosocial and health risk behavior in schools: Initial development of a screening measure. *School Mental Health, 6*, 137-149. doi:10.1007/s12310-014-9123-y

## • Other Publications

3. **Jacobucci, R.**, @Shao, S., & @Hattori, M. (2020). On the integration of machine learning and psychometrics. *The Score (APA Div. 5 Newsletter)*.
2. @Hong, M. R., **Jacobucci, R.**. (2019). Review of Growth Modeling: Structural Equation and Multilevel Modeling Approaches (Grimm, Ram & Estabrook, 2017). *Psychometrika*, 84, 327-332.
1. Grimm, K. J., **Jacobucci, R.**, McArdle, J. J. (January, 2017). Big data methods and psychological science. *Psychological Science Agenda*.

## • Chapters

5. Brandmaier, A. M. & **Jacobucci, R.** (2023). Machine-Learning Approaches to Structural Equation Modeling. In Handbook of Structural Equation Modeling, 2nd ed.; Hoyle, R.H., Ed.; Guilford Press: New York, NY.
4. Grimm, K. J., **Jacobucci, R.**, & McArdle, J. J. (2023). Decision trees and ensemble methods in the behavioral sciences. In H. Cooper, M. N. Coutanche, L. M. McMullen, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), APA handbook of research methods in psychology: Data analysis and research publication (pp. 429-448). American Psychological Association.
3. Grimm, K. J., Stegmann, G., **Jacobucci, R.**, & Serang, S. (2020). Big data in developmental psychology. In S. E. Woo, L. Tay, & R. W. Proctor (Eds.), Big data methods for psychological research: New horizons and challenges. Washington, DC: American Psychological Association.
2. **Jacobucci, R.** & Grimm, K. J. (2018). Regularized estimation of multivariate latent change score models. Advances in Longitudinal Models for Multivariate Psychology: A Festschrift for Jack McArdle, 109-125. Routledge, London.
1. Grimm, K. J. & **Jacobucci, R.** (2018). Individually varying time metrics in latent change score models. Advances in Longitudinal Models for Multivariate Psychology: A Festschrift for Jack McArdle. Routledge, London.

## • Technical Reports

2. **Jacobucci, R.** (2018, January 18). Decision tree stability and its effect on interpretation. *PsyArXiv preprint*: <https://doi.org/10.31234/osf.io/f2utw>.
1. **Jacobucci, R.** (2017). regsem: Regularized Structural Equation Modeling. *arXiv preprint arXiv:1703.08489*.

## • In Popular Press

2. Abrams, Z. (2023). AI is changing every aspect of psychology. Here's what to watch for. APA Monitor, 54. <https://www.apa.org/monitor/2023/07/psychology-embracing-ai>
1. Sleek, S. (2022). How Machine Learning Is Transforming Psychological Science. APS Observer, 36. <https://www.psychologicalscience.org/observer/machine-learning-transforming-psychological-science>

## Presentations

### • Invited Presentations

**Jacobucci, R.** (2022, November). *Flexible Specification of Large Structural Equation Models with Regularization*. Invited talk given at the University of Illinois Quant Brown Bag Speaker Series.

- Jacobucci, R.** (2022, May). *Heterogeneity in the Pathways to Suicidal Ideation*. Invited talk given at the 34th Annual Convention for Association for Psychological Science, Chicago, IL.
- Jacobucci, R.** (2022, May). *Heterogeneity in Suicide*. Invited talk given at the University of Virginia's Psychology Colloquium.
- Jacobucci, R.** (2022, February). *Measurement and Prediction*. Invited talk given at the UC Davis Quantitative Psychology Brown Bag Speaker Series.
- Jacobucci, R.** (2020, October). *Theory based dynamic text analysis*. Invited talk given to the Screenomics Lab at Stanford.
- Jacobucci, R.** (2020, October). *Using imperfectly measured predictors in machine learning*. Workforce Science workshop at Rice University in Houston, Texas. (Conference canceled)
- Jacobucci, R.** (2020, October). *Machine learning for suicide research*. Invited talk given at the UCLA Quantitative Psychology Brown Bag.
- Jacobucci, R.** (2019, May). *Flexible specification of large structural equation models with regularization*. Keynote speech given at the Big Data in Psychology Pre-Conference in Dubrovnik, Croatia. Video: <https://www.psycharchives.org/handle/20.500.12034/2118>
- Jacobucci, R.** (2019, February). *Novel assessment strategies for improving our understanding of mental health*. Invited talk given at the Quant Methods colloquium at Vanderbilt University.
- Jacobucci, R.,** Hong, M., Brandmaier, A., Ammerman, B., & McCloskey, M. (2018, October). *Assessing Continuous Versus Categorical Diagnosis Using Latent Variable Modeling*. Invited talk given at the Arizona State Quantitative Psychology brown bag.
- Jacobucci, R.,** Hong, M., Brandmaier, A., Ammerman, B., & McCloskey, M. (2018, October). *Assessing Continuous Versus Categorical Diagnosis Using Latent Variable Modeling*. Invited talk given at the Quantitative Developmental Systems Methodology Core at Penn State University.
- Jacobucci, R.** (2018, July). *Flexible specification of large structural equation models with regularization*. Invited talk given at the Max Planck Institute for Human Development in Berlin, Germany.

## • Oral Presentations

- Jacobucci, R.** & Ammerman, B. (2023, November). Using baseline data to identify heterogeneity in within-person processes: the use of longitudinal recursive partitioning. Paper submitted for presentation at the 57th Association for Behavioral and Cognitive Therapies Conference, Seattle, Washington.
- Jacobucci, R.,** Jiang, M., & Ammerman, B. (2023, November). Predicting suicidal ideation endorsement with text passively collected from screenshots. Paper submitted for presentation at the 57th Association for Behavioral and Cognitive Therapies Conference, Seattle, Washington.
- Ammerman, B.A., Shoa, S., & **Jacobucci, R.** (2023, November). Daily smartphone use and suicidal ideation: A means for social connection. In B.A. Ammerman (Chair), Utilizing intensive data collection methodologies to examine the near-term relationship between smartphone use and suicide risk. Symposium submitted to the 57th Annual Convention for the Association for Behavioral and Cognitive Therapies, Seattle, Washington.
- Jacobucci, R.** (2023, October). Predicting suicidal ideation endorsement with text passively collected from screenshots. Paper presented at the 2023 Conference for the Society of Multivariate Experimental Psychology, Iowa City, Iowa.
- @McClure, K. & **Jacobucci, R.** (2023, July). Factors impacting high dimensional graded response model calibration. Paper to be presented at the International Meeting of the Psychometric Society 2023, College Park, Maryland.
- @Shao, S. & **Jacobucci, R.** (2023, July). Sample planning for detecting cross-lag effect in longitudinal studies with ordinal outcomes. Paper to be presented at the International Meeting of the Psychometric Society 2023, College Park, Maryland.

- Jacobucci, R.**, Jiang, M., & Ammerman, B. A. (2023, June). Predicting suicidal ideation endorsement with text passively collected from screenshots. Paper presented at the Society for Ambulatory Assessment Conference 2023, Amsterdam, Netherlands.
- Jacobucci, R.** & Ammerman, B. A. (2023, June). Examining the dynamic relationship between alcohol use and NSSI at the group and individual levels. Paper presented at the 18th Annual Convention for the International Society for the Study of Self-Injury, Vienna, Austria.
- Jacobucci, R.** (2023, March). Advancing real-time suicide risk detection through the digital phenotyping smartphone application screenomics. Paper presented at the Screenomics Summit, Stanford, California.
- @Shao, S., **Jacobucci, R.**, (2021, July). Dynamic Poisson Factor Analysis: A Hierarchical Bayesian Approach with Intensive Text Data. Invited symposium at the International Meeting of the Psychometric Society. Won the best student presentation award sponsored by Duolingo.
- @McClure, K.E., **Jacobucci, R.**, & Ammerman, B.A. (2020, March). Disclosure of Suicidality and Open-Response Questions: A Blended Text Mining Approach. Paper submitted for presentation at the 54th Annual Convention for the Association for Behavioral and Cognitive Therapies, Philadelphia, Pennsylvania.
- Jacobucci, R.** (2019, November). The use text mining for clinical research: An overview of the methodology. Paper presented at the 53rd Annual Convention for the Association for Behavioral and Cognitive Therapies, Atlanta, Georgia.
- Ammerman, B.A., Wilcox, K. T., & **Jacobucci, R.** (2019, November) A nuanced examination of the relationship between social connectedness and suicidal ideation. Paper presented at the 53rd Annual Convention for the Association for Behavioral and Cognitive Therapies, Atlanta, Georgia.
- Park, Y., O’Loughlin, C. M., **Jacobucci, R.** , & Ammerman, B.A. (2019, November). Examining person-specific reasons for living in the prediction of suicidal ideation: A text mining approach. Paper presented at the 53rd Annual Convention for the Association for Behavioral and Cognitive Therapies, Atlanta, Georgia.
- Wilcox, K. T., **Jacobucci, R.** , McCloskey, M. S. & Ammerman, B.A.(2019, November). Evaluating personal narratives of interpersonal relationships via text mining to predict nonsuicidal self-injury. Paper presented at the 53rd Annual Convention for the Association for Behavioral and Cognitive Therapies, Atlanta, Georgia.
- Jacobucci, R.**, Hong, M., Brandmaier, A., Ammerman, B., & McCloskey, M. (2018, September). *Assessing Continuous Versus Categorical Diagnosis Using Latent Variable Modeling*. Talk given at the Quantitative Studies Group at the University of Notre Dame.
- Stegmann, G., **Jacobucci, R.**, Serang, S., & Grimm, K. J. (2018, July). *Identifying divergent nonlinear growth trajectories using recursive partitioning*. International Meeting of Psychometric Society. New York, NY.
- Grimm, K. J., Stegmann, G., **Jacobucci, R.**, & Serang, S. (2018, March). Machine learning approaches to understanding differences in longitudinal change trajectories. Keynote address at the 6th Annual Meeting of the Texas Universities’ Educational Statistics and Psychometrics Alliance.
- Jacobucci, R.** (2017, November). *Exploratory data mining for a single outcome in clinical research*. Paper presented at the 51st Annual Convention for the Association for Behavioral and Cognitive Therapies, San Diego, California.
- Ammerman, B. A., **Jacobucci, R.**, Turner, B. J., Serang, S., & McCloskey, M. S. (2017, November). *Quantifying the importance of lifetime frequency versus number of methods used in the consideration of NSSI severity*. Paper presented at the 51st Annual Convention for the Association for Behavioral and Cognitive Therapies, San Diego, California.
- Jacobucci, R.**, Serang, S., & Ammerman, B.A. (2017, November). *Multivariate approaches to exploratory data mining with the application of exploratory mediation for self-injury*. Paper presented at the 51st Annual Convention for the Association for Behavioral and Cognitive Therapies, San Diego, California.
- Burke, T. A., **Jacobucci, R.**, Ammerman, B.A., Hamilton, J. L., & Alloy, L. B. (2017, June). *Using exploratory data mining to compare importance of risk factors in predicting recent versus former history of non-suicidal self-injury*. Paper presented at the 51st Annual Convention for the Association for Behavioral and Cognitive Therapies, San Diego, California.



- Kleiman, E.M., **Jacobucci, R.**, Ammerman, B.A., Turner, B.J., Beale, E.E., Fedeor, S., Huffman, J.C., & Nock, M. K. (2017, June). *What affect states are most strongly associated with suicidal ideation? A real-time monitoring, exploratory data mining study*. Paper presented at the 51st Annual Convention for the Association for Behavioral and Cognitive Therapies, San Diego, California.
- Zelinski, E. M., **Jacobucci, R.** (2017, July). *Heterogeneity in cognitive change trajectories of older adults observed from structural equation model trees*. Alzheimer's Association International Conference in London, UK
- Burke, T. A., **Jacobucci, R.**, Ammerman, B. A., Piccirillo, M., McCloskey M., & Alloy, L. B. (2017, April). *Identifying the relative importance of non-suicidal self-injury features in predicting suicidal ideation and behavior using exploratory data mining*. Paper presented at the 50th Annual Conference of American Association of Suicidology in Pheonix, Arizona.
- Jacobucci, R.**, Zelinski, E. M. (2016, November). *The bi-directional relationship between health and cognition in older age*. Paper presented at the Gerontological Society of America Annual Meeting, New Orleans, Louisiana.
- Peters, K., **Jacobucci, R.**, Prescott, C., Walters, E., McArdle, J. J. (2016, November). *Computerized adaptive testing of cognitive abilities in the Project Talent Aging Study*. Paper presented at the Gerontological Society of America Annual Meeting, New Orleans, Louisiana.
- Jacobucci, R.**, Grimm, K. J. (2016, October). *Psuedo-continuous testing of the latent difference score model*. Paper invited for presentation at the conference to honor the work of Jack McArdle, Richmond, Virginia.
- Grimm, K. J., **Jacobucci, R.** (2016, October). *Individually-varying time metrics in latent change score models*. Paper invited for presentation at the conference to honor the work of Jack McArdle, Richmond, Virginia.
- Jacobucci, R.**, Grimm, K. J., McArdle, J. J. (2016, July). *Comparison of frequentist and Bayesian regularization in structural equation modeling*. Paper presented at the International Meeting for the Psychometric Society, Asheville, North Carolina.
- Ammerman, B. A., **Jacobucci, R.**, Kleiman, E. M., Muehlenkamp, J., J. & McCloskey, M. S. (2015, November). *The exploration and validation of an empirically derived frequency criteria for NSSI Disorder*. Paper presented at the 49th Annual Convention for the Association for Behavioral and Cognitive Therapies, Chicago, Illinois
- Jacobucci, R.**, Prindle, J. J., McArdle, J. J. (2015, September). *An Application of Exploratory Data Mining in Project TALENT*. Paper presented at the International Meeting for Intelligence Research Annual Conference, Albuquerque, New Mexico.

## • Poster Presentations

- Jacobucci, R.**, & Zelinski, E. M. (2017, July). *Exploratory Search for Heterogeneity in Change Across Old Age Using Structural Equation Model Trees*. Poster presented at the International Association of Gerontology and Geriatrics, San Francisco, California.
- Khoddam, R., Cho, J., Jacobucci, R., Prescott, C. A., & Leventhal, A. M. (2017, March). *Bivariate Latent Difference Score Modeling to Examine the Relationship between Conduct Problems and Cigarette Smoking among Adolescents*. Poster presented at the Society for Research on Nicotine and Tobacco annual meeting, Florence, Italy.
- Ammerman, B. A., **Jacobucci, R.**, & McCloskey, M. S. (2016, June). *The Prediction of Non-Suicidal Self-Injury Frequency Using Random Forests*. Poster presented at the 11th Annual Meeting of the International Society for the Study of Self-Injury, Eau Claire, Wisconsin.
- Jacobucci, R.**, Hayes, T., Zelinski, E. M. (2015, November). *Evaluating Methods for Generalizing from a Convenience Sample*. Poster presented at the 68th Annual Scientific Meeting of the Gerontological Society of America, Orlando, Florida.
- Zelinski, E., **Jacobucci, R.**, Kennison, R., & Zak, D. (2014, November). *Can a convenience sample produce generalizable results?* Poster session presented at the Gerontological Society of America Annual Scientific Meeting, Washington, DC.

- Jacobucci, R.**, Williams, J. E., & Thiruselvam, I. (2013, January). *A confirmatory factor analysis of the short form for the IPIP-NEO five-factor model personality scale*. Poster session presented at the Society for Personality and Social Psychology, New Orleans, Louisiana.
- Jacobucci, R.**, Brownfield, C., & Williams, J. E. (2012, December). *Intelligence as a factor in criminal offender risk assessment*. Poster session presented at the International Society for Intelligence Research, San Antonio, Texas.
- Jacobucci, R.**, Williams, J. E., & Thiruselvam, I. (2012, March). *Convergent validity of two short form measures of the five factor model of personality*. Poster session presented at the Iowa Psychological Association Spring Conference, Ames, Iowa.

## Software

- Jacobucci, R.** et al. (2022). regsem: Performs Regularization on Structural Equation Models (version 1.9.3) [Software]. Available from <https://cran.r-project.org/web/packages/index.html>  
– Downloads as of 01/23: > 300,000
- Serang, S., **Jacobucci, R.**, Grimm, K. J., Stegmann, G., & Brandmaier, A. M. (20202). MplusTrees: Decision Trees with Structural Equation Models Fit in 'Mplus' (version 0.2.2) [Software]. Available from <https://cran.r-project.org/web/packages/MplusTrees/index.html>  
– Downloads as of 01/23: > 16,000
- Jacobucci, R.**, Stewart, S., Abdollell, M., Serang, S., & Stegmann, G. (2018). longRPart2: Recursive Partitioning of Longitudinal Data (version 0.2.3) [Software]. Available from <https://cran.r-project.org/web/packages/longRPart2/index.html>  
– Downloads as of 01/23: > 21,000
- Jacobucci, R.** (2018). dtree: Decision Trees (version 0.4.2) [Software]. Available from <https://cran.r-project.org/web/packages/dtree/index.html>
- Jacobucci, R.** (2016). autosem: Performs Specification Search in Structural Equation Models (version 0.1.0) [Software]. Available from <https://cran.r-project.org/web/packages/autoSEM/index.html>

## Teaching Experience

### • Classes

#### **Undergraduate Psych Statistics**

PSY30100 - 03: Experimental Psychology I - Statistics  
Fall 2017, 2018, & 2020, University of Notre Dame

#### **Graduate Regression**

PSY60101 - 01: Quantitative Methods in Psychology II  
Spring 2018, 2019, 2020, 2021, & 2022, University of Notre Dame

#### **Machine Learning for Social & Behavioral Research**

Joint Undergraduate & Graduate  
Fall 2019 & 2022, University of Notre Dame

### • Workshops

#### **Advanced Machine Learning**

Statistical Horizons. October 2021 & May 2022  
Role: Instructor

#### **Structural Equation Modeling in Longitudinal Research**

APA Advanced Training Institutes. 2x: June 2020 & July 2020  
Role: Instructor

### **Exploratory Data Mining via SEARCH Strategies**

8/15/2016-8/19/2016 & 8/14/2017-8/18/2017

University of Michigan, Ann Arbor, MI.

Role: Lecturer and lab instructor.

### **Big Data: Exploratory Data Mining in Behavioral Research**

APA Advanced Training Institutes. 6/6/2016-6/10/2016 & 6/5/2017-6/9/2017

Arizona State University, Tempe, AZ

Role: Lecturer and lab instructor.

## **Professional Activities**

- **Editorial Boards**

Psychological Methods

Clinical Psychological Science

Journal for Quantitative and Computational Methods in Behavioral Sciences (QCMB)

- **Reviewing**

Journal of Consulting and Clinical Psychology; Structural Equation Modeling; Advances in Methods and Practices in Psychological Science; Multivariate Behavioral Research; Journal of Mathematical Psychology; Psychological Methods; Behavior Research Methods; Psychometrika; BMJ Open; Brain Sciences; JMIR Mental Health; Clinical Psychological Science; Addiction Research; Journal of Psychiatric Research; Suicide and Life-Threatening Behavior; British Journal of Clinical Psychology; Behavior Therapy; Journal of Clinical Child & Adolescent Psychology; Archives of Suicide Research; Child Maltreatment; Perspectives on Psychological Science; Biological Psychiatry; Journal of Consulting and Clinical Psychology; Addiction Research & Theory; PNAS; Acta Psychiatrica Scandinavica

- **Grant Reviewing**

NIMH Urgent COVID-19 – 02/2023

NIMH T32 – 11/2020

NIMH R01 – 07/2020

Swiss National Science Foundation – 06/2019