

Curriculum Vitae

Haley E. Yaremych

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EDUCATION

Vanderbilt University, Nashville, TN **2019-present**
Ph.D. Student, Quantitative Methods

Vanderbilt University, Nashville, TN **2019-2021**
M.S., Quantitative Methods
Thesis: Centering Categorical Predictors in Multilevel Models: Best Practices and Interpretation
Mentor: Kristopher J. Preacher, Ph.D.

University of Michigan, Ann Arbor, MI **2013-2017**
B.A., Psychology, with Honors
Minors, Applied Statistics, Community Action & Social Change
Thesis: Prosocial Development Between Siblings: The Role of Marital Quality and Parents' Emotion Socialization Practice
Mentor: Brenda L. Volling, Ph.D.

FUNDING

National Science Foundation Graduate Research Fellowship **Jun 2021-Jun 2024**
Vanderbilt University
Total Award Amount: \$138,000
Project Description: Identifying and resolving collinearity problems in multilevel models.

National Institutes of Health Postbaccalaureate Research Fellowship **Jul 2017-Jun 2019**
Social & Behavioral Branch, National Human Genome Research Institute
Total Award Amount: \$57,000
Principal Investigator: Susan Persky, PhD
Project Description: Several studies aimed at developing novel methods for examining behavioral data, virtual reality for behavioral health research, and communicating with parents about genetics and child health.

Biostatistics Summer Research Fellowship **Jun 2016-Jul 2016**
School of Public Health, University of Michigan
Total Award Amount: \$3,600
Principal Investigator: Goncalo Abecasis, DPhil
Project Description: Investigating associations between genetic loci and self-reported symptoms of mental illness via a genome-wide association study.

PUBLICATIONS & PRESENTATIONS

Peer-Reviewed Publications

Yaremych, H.E., & Persky, S. (In press). Development and validation of the Parental Food Choice Guilt Scale. *European Journal of Psychological Assessment*.

- Cho, S.-J., Preacher, K.J., **Yaremych, H.E.**, Naveiras, M., Fuchs, D., & Fuchs, L.S. (2023). Modeling cluster-specific functional covariate effects in cluster randomized controlled trials using factor smooth functions of a generalized additive mixed model. *Behavior Research Methods*. Advance online publication.
- Stuckelman, Z., **Yaremych, H.E.**, & Troseth, G. (2023). A new way to co-play with media: Evaluating the role of instructional prompts on parent-child interaction quality during digital application usage. *Translational Issues in Psychological Science*. Advance online publication.
- Cho, S.-J., Preacher, K.J., **Yaremych, H.E.**, Naveiras, M., Fuchs, D., & Fuchs, L.S. (2022). Modeling multilevel nonlinear treatment-by-covariate interaction in a cluster randomized trial using a generalized additive mixed model. *British Journal of Mathematical & Statistical Psychology*, 75(3), 493-521.
- Yaremych, H.E.**, & Persky, S. (2022). Recruiting fathers for parenting research: An evaluation of eight recruitment methods and an exploration of fathers' motivations for participation. *Parenting: Science and Practice*, 23(1), 1-32.
- Yaremych, H.E.**, Preacher, K.J., & Hedeker, D. (2021). Centering categorical predictors in multilevel models: Best practices and interpretation. *Psychological Methods*, 28(3), 613-630.
- Law, W.K., **Yaremych, H.E.**, Ferrer, R.A., Richardson, E., Wu, Y.P., & Turbitt, E. (2021). Decision making about genetic health information among family dyads: A systematic literature review. *Health Psychology Review*, 16(3), 412-429.
- Kesselring, I., **Yaremych, H.E.**, Pegg, S., Dickey, L., & Kujawa, A. (2021). Zoom or in-person: An ecological momentary assessment study of time with friends and depressive symptoms on affect in emerging adults. *Journal of Social & Clinical Psychology*, 40(2), 97-120.
- Persky, S., **Yaremych, H.E.**, Goldring, M.R., Ferrer, R.A., Rose, M.K., & Hollister, B.M. (2020). Investigating the efficacy of genetic, environmental, and multifactorial risk information when communicating obesity risk to parents of young children. *Annals of Behavioral Medicine*, 55(8), 720-733.
- Persky, S., & **Yaremych, H.E.** (2020). Parents' genetic attributions for children's eating behaviors: Relationships with beliefs, emotions, and food choice behavior. *Appetite*, 155.
- Hollister, B.M., **Yaremych, H.E.**, Goldring, M.R., & Persky, S. (2019). Mothers' and fathers' cognitive and affective responses to epigenetics concepts. *Environmental Epigenetics*, 5(4), 1-10.
- Yaremych, H.E.**, & Persky, S. (2019). Tracing physical behavior in virtual reality: A narrative review of applications to social psychology. *Journal of Experimental Social Psychology*, 85.
- Yaremych, H.E.**, Kistler, W.D., Trivedi, N., & Persky, S. (2019). Path tortuosity in virtual reality: A novel approach for quantifying behavioral process in a food choice context. *Cyberpsychology, Behavior, and Social Networking*, 22(7), 486-493.
- Persky, S., Ferrer, R.A., Klein, W.M.P., Goldring, M.R., Cohen, R.W., Kistler, W.D., **Yaremych, H.E.**, & Bouhlal, S. (2018). Effects of fruit and vegetable feeding messages on mothers and fathers: Interactions between emotional state and health message framing. *Annals of Behavioral Medicine*, 53(9), 789-800.
- Yaremych, H.E.**, & Volling, B.L. (2018). Sibling relationships and mothers' and fathers' emotion socialization practices: A within-family perspective. *Early Child Development and Care*, 190(2), 195-209.

Chapters

- Preacher, K.J., & **Yaremych, H.E.** (2022). Model selection in structural equation modeling. In R. Hoyle (Ed.) *Handbook of Structural Equation Modeling* (2nd ed.). Guilford.

Oral Presentations

- Yaremych, H.E.** (August, 2023). Accuracy and performance of the response screening platform for mixed models with genomics data. Project presented at the JMP Developers Meeting, Virtual.

- Yaremych, H.E.,** Preacher, K.J., & Hedeker, D. (July, 2023). Best practices for centering categorical predictors in multilevel models. Paper presented at the International Meeting of the Psychometric Society, College Park, MD.
- Preacher, K.J., & **Yaremych, H.E.** (July, 2023). Embracing nonlinear regression without getting all bent out of shape. Invited talk, The Canadian Centre for Research Analysis and Methods, University of Calgary, Calgary, AB.
- Yaremych, H.E.,** & Preacher, K.J. (June, 2023). Understanding the consequences of collinearity for multilevel models: The importance of disaggregation across levels. Paper presented at the Modern Modeling Methods Conference, Storrs, CT.
- Yaremych, H.E.,** & Castro-Schilo, L. (March, 2023). New tools for modeling and visualizing moderation and moderated mediation in JMP Pro. Project presented at the JMP Discovery Summit Europe, Virtual. <https://community.jmp.com/t5/Discovery-Summit-Europe-2023/New-Tools-for-Modeling-and-Visualizing-Moderation-and-Moderated/ta-p/572631>
- Yaremych, H.E.** (December, 2022). New tools for plotting and probing moderation and moderated mediation in JMP Pro. Project presented at the Vanderbilt University Quantitative Methods Forum, Nashville, TN.
- Yaremych, H.E.** (July, 2022). New tools for understanding and visualizing moderation, mediation, and simple slopes. Project presented at the JMP Developers Meeting, Virtual.
- Yaremych, H.E.,** & Preacher, K.J. (March, 2022). Conflation and collinearity in multilevel data. Project presented at the Vanderbilt University Quantitative Methods Forum, Nashville, TN.
- Preacher, K.J., & **Yaremych, H.E.** (October, 2021). Convergent evolution among information criteria useful in SEM. Paper presented at the annual meeting of the Society of Multivariate Experimental Psychology, Virtual.
- Yaremych, H.E.,** & Preacher, K.J. (2021, March). Investigating the impact of multicollinearity in multilevel models. Project presented at the Vanderbilt University Quantitative Methods Forum, Nashville, TN.
- Yaremych, H.E.,** & Preacher, K.J. (2020, April). Centering categorical predictors in multilevel models. Project presented at the Vanderbilt University Quantitative Methods Forum, Nashville, TN.
- Yaremych, H.E.,** & Persky, S. (2020, March). Measuring physical behavior in VR: Advantages, limitations, and future directions. Paper presented at the Global Symposium on Virtual Reality and Healthcare, Nashville, TN.
- Yaremych, H.E.,** & Persky, S. (2018, November). Virtual reality technology for studying social and behavioral processes. Invited talk at the Uniformed Services University Current Topics in Preventive Medicine and Biostatistics Seminar, Bethesda, MD.
- Yaremych, H.E.,** Kistler, W.D., Trivedi, N., & Persky, S. (2018, June). Path tortuosity in virtual reality: A novel approach for understanding behavioral process. Paper presented at the National Institutes of Health Three-Minute Talk Finals, Bethesda, MD. <https://www.youtube.com/watch?v=b9k5mFdcgow>
- Yaremych, H.E.,** Kistler, W.D., Trivedi, N., & Persky, S. (2018, April). Path tortuosity in virtual reality: A novel approach for understanding behavioral process. Paper presented at the Technology, Mind, & Society Conference, Washington, DC.
- Yaremych, H.E.,** Boland, S.E., Hollister, B.M., Kistler, W., & Persky, S. (2017, October). New technology and child health. Project presented at Social & Behavioral Research Branch Works-in-Progress Meeting, Bethesda, MD.

Poster Presentations

- Yaremych, H.E.** (2023, August). Computational speed of JMP's response screening platform for mixed models with genomics data. SAS Intern Expo, SAS, Inc., Cary, NC.
- Yaremych, H.E.,** Brown-Schmidt, S., Cho, S.-J., & Preacher, K.J. (2022, August). A Bayesian approach for modeling three-way cross-classified multilevel data. American Psychological Association Annual Convention, Minneapolis, MN.

- Yaremych, H.E.,** Preacher, K.J., & Hedeker, D. (2022, February). Working with categorical predictors in multilevel models: A brief tutorial. Society for Personality & Social Psychology Conference, San Francisco, CA.
- Yaremych, H.E.,** & Preacher, K.J. (2021, July). Relationships between centering choices and collinearity problems in multilevel models. International Meeting of the Psychometric Society, Virtual.
- Yaremych, H.E.,** & Persky, S. (2021, May). Development and validation of the Guilt About Child Feeding Scale. Association for Psychological Science Poster Showcase, Virtual.
- Yaremych, H.E.,** Preacher, K.J., & Hedeker, D. (2020, June). Centering categorical predictors in multilevel models. Association for Psychological Science Poster Showcase, Virtual.
- Yaremych, H.E.,** & Persky, S. (2019, May). Evaluating the effectiveness of eight methods for recruiting fathers to participate in parenting research. Association for Psychological Science Conference, Washington, DC.
- Yaremych, H.E.,** Kistler, W.D., Trivedi, N., & Persky, S. (2019, February). Linking path tortuosity with emotional experience: Exploring a novel metric for quantifying behavioral process. Society for Personality & Social Psychology Conference, Portland, OR.
- Yaremych, H.E.,** Ferrer, R.A., & Persky, S. (2018, November). Learning about child obesity risk based on interactive genetic and environmental factors: How do parents react? National Human Genome Research Institute Annual Symposium, Bethesda, MD.
- Yaremych, H.E.,** Boland, S.E., & Persky, S. (2018, May). Recruiting mothers and fathers for participation in health research: A method comparison study. National Institutes of Health Postbac Poster Day, Bethesda, MD.
- Yaremych, H.E.,** Goldring, M.R., Cohen, R.W., Kistler, W., Bouhlal, S., Ferrer, R., Klein, W., & Persky, S. (2017, October). Mothers' and fathers' feeding behavior: Influences of family health history and health message characteristics. National Human Genome Research Institute Annual Symposium, Bethesda, MD.
- Yaremych, H.E.,** & Volling, B.L. (2017, April). Prosocial development between siblings: The role of marital quality and parents' emotion socialization practices. University of Michigan Psychology Research Forum, Ann Arbor, MI.
- Yaremych, H.E.,** & Nwokeabia, C.J. (2016, July). A genome-wide association study for mental illness. Symposium on Big Data, Human Health, & Statistics, Ann Arbor, MI.

SOFTWARE

Yaremych, H.E. (2022). *Moderation and Mediation*. JMP Add-In. Available from <https://community.jmp.com/t5/JMP-Add-Ins/Moderation-and-Mediation-Add-In/ta-p/527203>

MEDIA

Yaremych, H.E. (2022). Who, what, why, and how? Tools for modeling and visualizing moderation and mediation in JMP Pro. *JMP Community Blog Post*. Available from <https://community.jmp.com/t5/JMPer-Cable/Who-what-why-and-how-Tools-for-modeling-and-visualizing/ba-p/527173>

HONORS & AWARDS

Susan Gray Award, Department of Psychology & Human Development, Vanderbilt University, 2023

Psychometric Society Travel Award, Psychometric Society, 2023

Vanderbilt Award for Doctoral Discovery, Vanderbilt University, 2023

Barbara Wallston Award, Department of Psychology & Human Development, Vanderbilt University, 2022

Graduate Research Fellowship Award, National Science Foundation, 2021-2024

Teaching Assistant of the Year, Peabody College, Vanderbilt University, 2020

Three-Minute Talk Competition Winner, National Human Genome Research Institute, 2018

Postbaccalaureate Intramural Research Training Award, National Institutes of Health, 2017-2019
Graduation with Highest Distinction, University of Michigan College of Literature, Science, & the Arts, 2017
Honors in Psychology, University of Michigan Honors College, 2017
Phi Beta Kappa, University of Michigan College of Literature, Science, & the Arts, 2016
Mary E.B. Markley Scholarship, American Association of University Women, 2016
James B. Angell Scholar, University of Michigan College of Literature, Science, & the Arts, 2014-2017
William J. Branstrom Freshman Prize, University of Michigan College of Literature, Science, & the Arts, 2014

TEACHING EXPERIENCE

Teaching Assistant **Aug 2019-present**

Quantitative Methods Department, Vanderbilt University, Nashville, TN
2 semesters: TA for PSY-PC 2110, Introductory Statistics
1 semester: TA for PSY-GS 8882, Multilevel Modeling

Tutor **Aug 2016–June 2017**

Athletic Department, University of Michigan, Ann Arbor, MI
Tutored for courses including: STATS 250, Introduction to Statistics & Data Analysis; STATS 401, Applied Statistical Methods II; SI 106, Introduction to Python; PSYCH 111, Introduction to Psychology; PSYCH 240, Cognitive Psychology; PSYCH 250, Developmental Psychology

Tutor & Textbook Contributor **Feb 2016–Sept 2016**

School of Information, University of Michigan, Ann Arbor, MI
Tutored students privately in SI 106, Introduction to Python; contributed to the online course textbook by creating practice exercise item banks

PROFESSIONAL SERVICE

Ad hoc reviewer: Developmental Psychology, Multivariate Behavioral Research, Parenting: Science and Practice, Applied Research in Quality of Life, Journal of Medical Internet Research, Psychology of Popular Media, Journal of Health Sciences, Journal of Clinical Psychology in Medical Settings

Graduate review mentor: Vanderbilt Undergraduate Research Journal

MEMBERSHIPS

- American Psychological Association, Division 5 (2021 – present)
- Psychometric Society (2021 – present)
- Association for Psychological Science (2019 – 2021)
- Society for Personality & Social Psychology (2019 – 2022)

PROFESSIONAL SKILLS

- Fluent with R, *Mplus*, Stan, JSL/JMP, WinBUGS, and SPSS for data analysis and visualization
- Experience with Python, Git and GitHub, SAS, STATA, and Mathematica
- Study design and planning; creating manipulation materials and surveys to be used in experiments; sample size planning and power analysis
- Conducting structured interviews; verbally administering scales including the Sibling Inventory of Differential Experience and Sibling Inventory of Behavior
- Systematic literature review