# Jake Leonard

# Curriculum Vitae

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# - Education -

Villanova University, Villanova, PA

Fall 2021

M.S. Experimental Psychology

GPA: 4.0

Thesis: Father involvement and academic achievement for children experiencing homelessness: A person-centered approach.

Advisor: Janette Herbers

William & Mary, Williamsburg, VA B.S. Psychology, Minor in English

Phi Beta Kappa, Magna Cum Laude GPA: 3.69 Spring 2018

# Research Experience

# Research Assistant for Frank Porter Graham Child Development Institute

February 2022 – Present

University of North Carolina at Chapel Hill, PI: Ximena Franco-Jenkins

- Work with the National Implementation Research Network at FPG on the Effective Implementation Cohort, a large-scale learning project funded by Bill and Melinda Gates Foundation designed to learn about and aid in the implementation of high-quality math curricula across 19 school districts in 5 states that encompass over 110,000 students.
- Conduct and report statistical analyses in SPSS, Mplus, Blimp, and R (ranging from descriptive reports to multilevel models and a wide variety of latent variable frameworks) for formative and summative outputs presented to our funder; summarize and report tends in data under tight deadlines for continuous improvement efforts; develop agenda, organize, and lead biweekly meetings between EIC data team and statistical consultants; retrieve and manage project's administrative data; compile reports..

# Project Manager and Graduate Assistant for Adversity & Resilience in Development Lab

August 2018 - August 2021

- Villanova University, PI: Janette Herbers
- Lab examines risk and resilience in the context of childhood homelessness through multiple levels of analysis.
- Managed 9 research assistants for Parents and Children Together Project, an NSF-funded longitudinal study that investigates impact of homelessness on infant's development and evaluate efficacy of My Baby's First Teacher, a parenting program for caregivers of infants experiencing homelessness.
- Fostered relationships with community service providers; spearheaded recruitment for community comparison sample; trained research assistants on study's protocol; oversaw lab scheduling; successfully completed both initial and follow-up parent interviews; developed training modules for shelter staff to improve understanding of children's development; ethically managed data.

#### Graduate Assistant for Word Recognition & Auditory Perception Lab

November 2018 - May 2020

Villanova University, PI: Joseph Toscano

- Lab examines auditory perception, word recognition, and language development.
- Assisted in development of SPEC Model which uses artificial neural network to create computational model of phonemic processing using natural speech samples.
- Applied SPEC Model to understand how allophonic differences based on phoneme context alter cognitive representations of phoneme categories; altered neural network architecture to optimize model performance; successfully interpreted model output using R.

# Research Assistant for Healthy Beginnings Lab

January 2017 - May 2018

William & Mary, PI: Danielle Dallaire

- Lab examines the effects of parental incarceration on children's development.
- Authored IRB and formal research proposals; recruited community participants; collected, entered, and coded data for MA student's
  thesis; aided in experiment design; crafted nutritional booklet for pregnant women who were incarcerated.

### Capstone Project for Research in Physiological Psychology

William & Mary, Instructor: Paul Kieffaber

• Utilized electroencephalogram data; analyzed data using EEGLAB and ERPLAB.

August 2017 – December 2017

### **Publications & Presentations-**

#### Peer-Reviewed Publications

- **Leonard, J. A.** (2020). "The thing and the feeling of that thing:" The poetics of William Carlos Williams, neural representations of conceptual primitives, and grounded cognition. *CONCEPT*.
- Herbers, J. E., Cutuli, J. J., Keane, J. R., & **Leonard, J. A.** (2019). Childhood homelessness, resilience, and adolescent mental health: A prospective, person-centered approach. *Psychology in the Schools*.

### **Poster Presentations**

- Leonard, J.A., Johnson, M., Bookhout, M., & Franco-Jenkins, X. (2024, September). Math Enjoyment and Engagement among Middle Schoolers: Mean Differences Based on Student Ethnicity and Teachers' Culturally Responsive Practices [Poster Presentation]. Society for Research on Educational Effectiveness 2024 Annual Conference, Baltimore, MD.
- Leonard, J. A., Bookhout, M. K., Franco-Jenkins, X., Ward, C. S., & Morgan-Lopez, A. A. (2024, May). Individual- and district-level predictors of student math beliefs in the first year of curricula implementation [poster presentation]. Society for Prevention Research Annual Conference, Washington, D.C.
- Franco-Jenkins, X., **Leonard, J. A.**, Garcia, M., Ward, C. & Morgan-Lopez A. (2023, June). *Implementation Outcomes, Teachers Self-Efficacy and Cultural Pedagogy: Harmonizing Teachers' Perceptions across 19 School Districts* [Poster Presentation]. Society for Prevention Research Annual Conference, Washington, DC.
- Franco-Jenkins, X., Ward, C., & **Leonard, J. A.**, (2023, June). *Students' Voices Matter: Effective Implementation of a High-Quality Math Curriculum in Middle School* [Poster Presentation]. Society for Prevention Research Annual Conference, Washington, D.C.
- **Leonard, J. A.**, Buccelli, A. R., & Herbers, J. E. (2023, March). *Academic achievement and profiles of father involvement among children experiencing homelessness* [Poster Presentation]. Biannual Meeting for Society for Research in Child Development, Salt Lake City, Utah.
- Buccelli, A. R., **Leonard, J. A.**, & Haskett, J. E. (2023, March). *Longitudinal relations among infant temperament, parental warmth/negatively in childhood, and teenage social skills* [Poster Presentation].
- Ayemere, A., **Leonard, J. A.**, & Herbers, J. E. (2019, September). *Challenges associated with breastfeeding for mothers of infants experiencing homelessness* [Poster Presentation]. Villanova Student Research Symposium, Villanova, PA.
- Buccelli, A. R., **Leonard, J. A.**, & Herbers, J. E. (2019, August). From parents to children: Examining the relationship between parenting stress, warmth, and child self-regulation [Poster Presentation]. American Psychological Association Conference, Chicago, IL.
- Yu, H., **Leonard, J. A.**, & Herbers, J. E. (2019, June). *Residential mobility, child behavioral problems, and parental self-efficacy in families experiencing homelessness* [Poster Presentation]. Fourteenth International Conference on Interdisciplinary Social Sciences, Mexico City, Mexico.
- **Leonard, J. A.**, Buccelli, A. R., Vrabic, S. C., & Herbers, J. E. (2019, May). *Profiles of adversity among children experiencing homelessness* [Poster Presentation]. Association for Psychological Science Annual Conference, Washington, D.C.
- **Leonard, J. A.** (2018, February). *Protective factors against parental separation: A qualitative approach* [Poster Presentation]. William & Mary Undergraduate Science Research Symposium, Williamsburg, VA.

# **Blog Posts**

**Leonard, J. A.** (2022, October). How to escape the data doldrums. *FPG Implementation Division Blog.* https://fpg.unc.edu/implementation-division-blog-how-escape-data-doldrums

## — Research Skills-

Tools and Software: SPSS, Mplus, Blimp, R, Qualtrics, Python, Blimp, Keras, Pandas Toolkit, Matplotlib, Seaborn, MATLAB, EEGLAB,

EPRLAB, LaTeX, Microsoft Office Suite, Microsoft Access, NVivo, Slack, Citrix

Statistical Analyses: Multilevel modeling, latent profile analysis, latent class analysis, propensity score matching, moderated nonlinear factor analysis, confirmatory factor analysis, exploratory factor analysis, multigroup confirmatory factor analysis, item response theory analysis, dynamic fit indices analysis, principal component analysis,

missing value analysis, multiple regressions, logistic regressions, ANOVAs, t-tests, chi-square tests, and

others

### — Institutional Service –

NIRN Data Visualization Workgroup

NIRN Public Health Grant Writing Workgroup

February 2024 – Present
FPG Anti-Racist White Caucus Organizer

NIRN Equity Committee

Implementation Specialist 1 Hiring Search Committee

Research Assistant – Advanced Hiring Search Committee

August 2023

# — Clinically Relevant Experience -

# ACTS Transitional Housing, Philadelphia, PA

Volunteer May 2019 – March 2020

Organized and participated in weekly game nights for families staying in shelter.

# Homeless Health Initiative, Philadelphia, PA

Volunteer May 2019 – September 2020

- Assisted in weekly art classes with children experiencing family homelessness at People's Emergency Center's Summer camp.
- Worked with children ranging in age from 5- to 15-years old.

#### Williamsburg Child Care Center and Williamsburg Parent Cooperative Preschool, Williamsburg, VA

Volunteer Classroom Aide

January 2017 - May 2017

- Worked 6 hours a week at two local preschools as a part of Service Learning in Developmental Psychology.
- Dealt with 4 classrooms and children ranging in age from 2.5- to 5-years old.
- Focused on incorporating research findings into every-day interactions with children.

# — Teaching & Mentorship Experience -

Mentor August 2023 – Present

iMentor Baltimore

Support 11<sup>th</sup>-grade student to explore, plan, and prepare for post-secondary education

# Teaching Assistant for Psychological Research Methods

Villanova University, Instructor: Janette Herbers

• Utilized distant learning technology; led lab sections and lectured; designed review sessions; graded assignments; proctored exams.

### Teaching Assistant for Developmental Psychology

Fall 2019

Villanova University, Instructor: Janette Herbers

Graded assignments; proctored exams.

# — Other Experience

## Raleigh Food Not Bombs - Volunteer

August 2022 – January 2023

Spring 2019 & Spring 2020

• Distributed mutual aid (hot food, nonperishables, toiletries, blankets, etc.) weekly in solidarity with community members in need.

## Supporting Parents and Reducing Risk for Kids – Director of Research and Development

July 2020 – December 2021

- Acted as project manager for BrainSPARRK!, an app-based program for parents of infants experiencing homelessness which aims to encourage positive parenting practices, increase parents' developmental knowledge, and foster community among those parents.
- Conducted focus groups over Zoom with community service providers and parents; drafted grant proposals; translated idea for multiple audiences including app developers, service provides, and potential end users; designed website (www.sparrkparents.org).

# Psi Chi Villanova Chapter – Secretary

May 2019 - May 2020

• Aid in organizational planning, new member outreach, and budgeting.

# Healthy Beginnings Diaper Bank – Volunteer

October 2017 - May 2018

• Fundraised for and helped run Williamsburg's only diaper bank, which serves low-income families in community.

# William & Mary Club Water Polo – President, Captain, Travel Officer

August 2014 - May 2018

- Recruited new members, organized tournaments, taught skills to members, planned and ran daily practices.
- Focus on fundraising from alumni and community members.