

---

# Sarah Narvaiz

[snarvaiz@vols.utk.edu](mailto:snarvaiz@vols.utk.edu)

[www.sarahnarvaiz.com](http://www.sarahnarvaiz.com)

---

## EDUCATION

- 2023      **PhD, Educational Psychology and Research**      Knoxville, TN  
*University of Tennessee, Knoxville*  
Dissertation: Development and Validation of an Aspirational Capital Scale  
Advisor: Dr. Louis Rocconi
- Concentration: Evaluation, Statistics, and Methodology
- 2019      **MS, Educational Psychology**      Denton, TX  
*University of North Texas*  
Capstone Project: Literature Review of Advanced Technological Education Programs
- Concentration: Research and Evaluation

## PROFESSIONAL RESEARCH EXPERIENCE

- Present      **Research Scientist**  
*University of Tennessee (IES-funded project R305D220022)*
- Leading the Shiny app re-design to conduct sensitivity analyses for causal inference methods
  - Writes and reviews R code
  - Improves the design, architecture, and implementation of the Shiny app and R package
  - Reviews and writes code, leads programming, testing, and debugging of R produced software (Shiny app and R package)
  - Assists lead PI with project management per the grant (including workshops such as Statistical Horizons)
  - Engages in UX design principles: Prototyping, mockups, user flow diagrams, visual design, user testing/research, information architecture, and application development
  - Produces publishable technical papers for Shiny app and R packages/functions
- Present      **Research Scientist (Contractor)**  
*University of Tennessee*
- Developing a professional microcredential entitled “Getting Started in Educational Data Analytics Using R” for educational leaders, analysts and graduate students in the educational field
  - Serves as an instructional design to design and create a Canvas site for the microcredential course which include writing code in learnr documents via R, developing course materials, reviews and writes code, leads programming, testing, and debugging of R produced software and files
  - Manages version control of files and documents via GitHub for the team
- 2022-2023      **Graduate Research Assistant**  
*Supervisor: Dr. Joshua M. Rosenberg*

- Assists on IES-funded project Quantifying the Robustness of Casual Inferences (R305D220022)
- Develops Shiny apps to conduct causal inference sensitivity analysis
- Troubleshoots and fixes bugs in R packages and Shiny apps
- Co-lead the re-development of the KonFound-It Shiny app
- Assists in tracking project development per the grant

2021

**Survey Methodologist Intern***Service & Robotics Technology, Inc. (SRT)*

- Developed and validated criticality assessment instrument to assess and rank the importance of machine functioning towards the totality of system operations for SRT clients
- Served as a consultant for the HR team's staff demographic survey efforts
- Developed one-page infographic based on the demographic survey results as a tool to attract future candidates and company investors

2020 - 2022

**Graduate Research Assistant***Office of Institutional Research and Assessment*

- Coordinates and oversees the administration of the California Critical Thinking Skills Test (CCTST) at the university
- Collects data from online databases and university websites for peer comparisons
- Qualitatively codes open-ended responses for university assessments
- Creates visual graphics for reporting via R

2019 – 2020

**Graduate Research Assistant***Supervisor: Dr. Zoi Philippakos*

- Assisted supervisor on a funded Institute of Education Sciences (IES) grant project (R305A160242) addressing writing and reading in community colleges
- Collected, cleaned, coded, and analyzed quantitative and qualitative data under the supervision of Dr. Philippakos
- Conducted literature reviews on writing and reading performance, self-efficacy, and motivation

2018 – 2019

**Research Assistant***Gibson Consulting Group*

- Supported quantitative data collection by producing descriptive statistics, gathered comparison data from national databases, and performed outreach efforts to boost response rates for research projects
- Developed advanced data collection instruments in the survey software platform, Qualtrics,
- Coded survey and interview qualitative data using CAQDAS platforms, NVivo and Dedoose
- Provided technical assistance for school personnel and participants by administering surveys over the phone in English and Spanish, responding to confidentiality questions, and articulating purpose of research project in layman terms
- Assisted with sampling, recruitment, and raising response rates for large-scale research projects
- Assisted in project management by developing project status reports, budget documents, and grant proposals

---

## RESEARCH AND EVALUATION EXPERIENCE

- 2022            **Middle School Teachers' Adaptation of Open Science Education (OSE) Curriculum to Support Culturally Sustaining Teaching**  
*University of Tennessee, Knoxville*
- Examined the types of science teachers that have interest in adapting Open Science Education middle school curriculum materials to develop culturally sustaining teaching inside the classroom.
- 2021-22        **Self-Efficacy, Interest, and Belongingness—Underrepresented Students' Momentary Experience in CS1**  
*University of Tennessee, Knoxville*
- Conducted a study examining the experiences of underrepresented undergraduate students in an introductory computer science course using a Bayesian multivariate multilevel modeling approach to better understand how their experiences develop over the course of the semester.
- 2021-22        **Prevalence of Mixed Methods and Qualitative Courses in Educational Assessment, Evaluation, and Research Ph.D. Programs**  
*University of Tennessee, Knoxville*
- Conducted a synthesis study which examined the prevalence of mixed methods and qualitative courses included in the curriculum for Ph.D. programs in the United States listed under the Educational Assessment, Evaluation, and Research CIP codes provided by NCES to better understand the extent to which these are taught for evaluation training.
- 2020            **New Graduate Student Orientation and Teaching Assistant Orientation Evaluation**  
*University of Tennessee, Knoxville*
- Conducted program assessment of the 2020 New Graduate Student Orientation and the 2020 New Graduate Teaching Assistant/Associate Orientation by developing survey instruments, collecting data, cleaning, and analyzing data, submitting report to the Graduate School
- 2020            **College and Career Access (CCA) Program Needs Assessment**  
*Project GRAD- Knoxville*
- Conducted needs assessment for the (CCA) program by developing survey instruments and interview protocol, fielding survey in person and online, interviewing parents, cleaning, and analyzing data, and submitting Project GRAD Knoxville for program improvement
- 2019            **Students' Civic Online Reasoning Study- Stanford History Education Group (SHEG)**  
*Gibson Consulting Group*
- Led district recruiting efforts for a nationwide research project conducted by Stanford University
  - Coordinated with district personnel to ensure the implementation phase of the study launched successfully
  - Provided technical assistance to district personnel and teachers during the planning

and implementation phases

- Completed IRB paperwork to conduct studies in school districts across the United States
- Managed incentives for multiple research projects

2018 - 2019 **Arlington ISD Omnibus District Surveys**

*Gibson Consulting Group*

- Assisted in the development of three large-scale (parent, employee, student) surveys for AISD
- Provided technical assistance to parents, teachers, and district personnel during the administration of the surveys
- Collected quantitative comparison data from national databases
- Performed activities to boost response rates across all survey projects
- Translated and coded open-ended qualitative data for the surveys using CAQDAS platforms

2018 - 2019 **Texas Special Education Parent Involvement Survey**

*Gibson Consulting Group*

- Performed activities to boost response rates across all survey projects
- Administered surveys over the phone to collect data
- Provided technical assistance to parents, teachers, and district personnel during the administration of the surveys
- Performed activities to boost response rates across all survey projects

2018 - 2019 **Southern Methodist University Teaching Training Evaluation**

*Gibson Consulting Group*

- Produced descriptive statistics for program evaluation reports
- Conducted telephone interview surveys for program participants

2018 **Evaluation for Baker College Photonic Program**

*University of North Texas*

- Assisted advisor in writing a program evaluation report for a project funded by the National Science Foundation
- Developed needs assessment survey for annual photonics conference at the college

2018 **Capstone Project, Literature Review of Advanced Technological Education Programs**

*University of North Texas*

- Conducted literature review photonic technician workforce training programs at community colleges

2018 **Needs Assessment: The Kristin Farmer Autism Center (KFAC)**

*University of North Texas*

- Developed a program evaluation proposal for an Autism Center located at the university
- Conducted needs assessment by developing logic model and collecting survey data from parents and staff members

## TEACHING EXPERIENCE

- 2022            **EDPY 678: Statistics in Applied Fields III Teaching Assistant**  
*University of Tennessee, Knoxville*
- Assisted graduate-level students in and outside of class with concepts covering advanced data cleaning, missing data analysis, causal inference, moderation analysis, and mediation analysis
  - Taught class on introductory to R
  - Taught class on Moderation Analysis Using Linear Regression
- 2021            **EDPY 680: Advanced Educational Measurement (Psychometrics) Teaching Assistant**  
*University of Tennessee, Knoxville*
- Assisted graduate-level students in and outside of class with concepts covering CTT, EFA/CFA, G-Theory, and IRT
  - Taught class on introductory to R
  - Taught class on Exploratory Factor Analysis
- 2021-2022    **IP: Imagining Possibilities (PiPES) Data Science Instructor**  
*University of Tennessee, Knoxville*
- Developed curriculum with co-instructor and taught data science course to high school students from rural Tennessee as part of a project funded by National Institutes of Health (NIH)

## PUBLICATION

### Conference Proceedings

- Lishinski, A., **Narvaiz, S.**, Rosenberg, J. M. (2022). Self-Efficacy, Interest, and Belongingness—Underrepresented Students’ Momentary Experience in CS1. *International Computing Education Conference, V.1 (ICER 2022 V1)*, August 7–11, 2022, Lugano and Virtual Event, Switzerland. ACM, New York, NY, USA 17 Pages.
- MacArthur, C. A., Graham, S., Harris, K., Philippakos, Z., **Narvaiz, S.**, Voggt, A., & Nefferdorf, E. (2019). The Challenges of Writing Using Sources: Strategy Instruction Research from Middle School to College. *American Reading Forum Conference Proceedings*, (40), 1-44.
- Traga Philippakos, Z. A., MacArthur, C. A., & **Narvaiz, S.** (2020). Middle school English language arts: Design and implementation of a unit on argument using genre-based strategy instruction. *American Reading Forum Yearbook*, 40, 1-29.

### Manuscripts in Development

- Narvaiz, S.** (Submission goal- September 2023). COVID-19 Impact on University Orientations: Evaluating Virtual New Graduate Student Orientation Programs at a Research I University. *Target Journal: Journal of Student Affairs Research and Practice*.
- Butler, B., **Narvaiz, S.**, & Morrow, J. A. (submission goal—August 2023). Enhancing Academic English

Writing Skills in International Doctoral Students: Is Virtual Training Helpful? *Target Journal: Journal of International Students*.

## REPORTS

**Narvaiz, S., & Boyd, A.** (2020). 2020 New Graduate Student and Graduate Teaching Assistant Orientation Evaluation and Assessment Report. For the Graduate School at the University of Tennessee-Knoxville. (no Project #; 29 tables; 7 figures; no references; 68 pages)

**Narvaiz, S.** (2020). An Evaluation Report for Project GRAD Knoxville's College and Career Access Program: Parent Involvement Needs Assessment. For Project GRAD- Knoxville. (no Project #; 1 table; 7 figures; no references; 46 pages)

## PRESENTATIONS

### Professional Conference Presentations

Banks, A., Bland, D., Compton, K., & **Narvaiz, S.** (2022, April). *Prevalence of Mixed Methods and Qualitative Courses in Educational Assessment, Evaluation, and Research PhD programs* [Poster presentation]. Eastern Evaluation Research Society, Virtual Conference.

**Narvaiz, S., Boyd, A.** (2021, October). *Welcoming New Graduate Students During COVID: Assessing Virtual Orientations* [Presentation]. IUPUI Assessment, Virtual Conference.

**Narvaiz, S., Boyd, A.** (2021, June). *Welcoming New Graduate Students During COVID: Assessing Virtual Orientations* [Poster presentation]. NASPA, Virtual Conference.

**Narvaiz, S.** (2020, October<sup>1</sup>). *Methodological lessons and future considerations for maximizing parent survey response rates in a low-income community* [Paper presentation]. American Evaluation Association Conference 2020, October 27-20, Online.

**Narvaiz, S.** (2019, December). *Importance of Reflexivity in Qualitative Research* [Poster presentation]. The Qualitative Research Celebration of Learning, University of Tennessee.

### Client Presentations

**Narvaiz, S.** (2021, June). *Process Plan for Developing a Criticality Survey Tool*. Presentation for the leadership team at Service & Robotics Technology, Inc.

## SERVICE

### Conference Submission Reviewer

2021	Society for Research on Educational Effectiveness (SREE) Conference
2020	American Evaluation Association Conference
	<ul style="list-style-type: none"> <li>▪ Member of the 2020 PreK-12 Educational Evaluation Review Committee</li> </ul>

<sup>1</sup> Accepted but not presented due to 2020 COVID-19 pandemic

- Member of the 2020 Needs Assessment Review Committee
- Member of the 2020 Graduate Student and New Evaluators Review Committee

2019 American College Personnel Association - College Student Educators Conference

- Member of the 2020 ACPA Session Reviewers Committee

### Service to Community

2022 L&N STEM Academy Presentation introducing high school students to the data science field

2020 Guest Instructor- Socially Equal Energy Efficient Development (SEED) Career Readiness program

2021 TNAchieves Mentor for high school students in Knoxville, TN

### GRANTS

#### Funded

**Narvaiz, S.** (Co-PI) & Rocconi, L. 2022. *Stay the Course Grant*. Wiley Education Services. April 2022. (\$500)

#### Not Funded

**Narvaiz, S.** (Co-PI) & Rocconi, R. (2023). The Student Faculty Research Award. *The Development and Validation of the Aspirational Capital Scale*. University of Tennessee, Knoxville. December 2023. (\$4,691)

**Narvaiz, S.** (Co-PI) & Rocconi, R. (2023). Minority Dissertation Fellowship. *The Development and Validation of the Aspirational Capital Scale*. American Educational Research Association (AERA). May 2023. (\$24,993)

**Narvaiz, S.** (Co-PI) & Morrow, J. A. (Co-PI). 2020 Fellowship Award. *Availability and Awareness of Upskilling Programs During Economic Shocks*. Society for Research on Educational Effectiveness (SREE). June 2020. (\$8,000)

**Narvaiz, S. (Co-PI)** & Spurgeon, S. L. (Co-PI). Friends of EPC Student Research Award. *College and Career Program Needs Assessment*. University of Tennessee Educational Psychology & Counseling Department. March 2019. (\$200)

### HONORS/AWARDS

#### Awards

- 
- 2023 Graduate Student of the Year Award  
Department of Educational Leadership and Policy Studies (ELPS)
- 2023 Educators Hall of Honor  
College of Education, Health, and Human Science, University of Tennessee
- 2023 Excellence in Graduate Research  
Graduate Student Senate, University of Tennessee
- 2022 Student Presentation Award  
2022 Annual Conference, Eastern Evaluation Research Society (EERS)
- 2021 Graduate Research Student Fellowship  
Graduate School, University of Tennessee
- 2021 Continuing Research Award  
Educational Psychology & Counseling Department, University of Tennessee
- 2020 Travis Hawk Fellowship Award  
Educational Psychology & Counseling Department, University of Tennessee
- 2019 Emerging Scholar/Practitioner Award  
Educational Psychology & Counseling Department, University of Tennessee

### Honors

- 2019 Kappa Delta Pi  
International Honor Society in Education, University of North Texas
- 2014 Cum Laude  
Honors Graduate, Texas A&M University
- 2014 Phi Beta Kappa  
National Liberal Arts Honor Society, Texas A&M University
- 2014 Lambda Pi Eta  
National Communication Association's Honor Society, Texas A&M University

### TECHNICAL SKILLS

- Experience with statistical methodology including OLS regressions, logistic regression, multilevel modeling, Bayesian statistics, causal inference, classical test theory, item response theory, exploratory factor analysis, and confirmatory factor analysis
- Advanced in using R and SPSS for statistical analysis
- Proficient in using STATA and Github
- Advanced in using NVivo and Dedoose for qualitative analysis
- Advanced in developing surveys in Qualtrics and QuestionPro
- Experience in writing program evaluation, research, and grant proposals
- Experience in creating data visualizations, dashboards for reports, and Shiny



---

applications via R

## RELEVANT COURSEWORK

Foundations of Education Research Methodology  
Educational Statistics  
Survey Research Methods in Education  
Grant Proposal Writing Techniques  
Foundations of Psychoeducational Measurement  
Statistics for Educational Research  
Foundations of Program Evaluation  
Research Methods in Education  
Applied Program Evaluation  
Qualitative Research Methodology  
Data Mining and Machine Learning  
Applied Psychometrics  
Inferential Statistics  
Data Science in Education  
Survey Sampling  
Bayesian Statistics (ICPSR)  
Causal Inference (ICPSR)  
Multi-level Modeling (ICPSR)