

SARAH NAILIE CLERJUSTE

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EDUCATION

PhD in Educational Statistics and Research methods University of Delaware College of Education and Human Development	Expected graduation May 2025
Master of Arts in Education University of Delaware College of Education and Human Development	Dec 2022
Bachelor of Arts in Mathematics University of Florida Minor: Communication Studies	May 2020

PUBLICATIONS

Barbieri, C. A., Miller-Cotto, D., **Clerjuste, S. N.**, & Chawla, K. (2023). A meta-analysis of the worked examples effect on mathematics performance. *Educational Psychology Review*, 35(1). <https://doi.org/10.1007/s10648-023-09745-1>

Johnson, M.E. & **Clerjuste, S.N.** (2020). The association between somatic complaints and past-30-day opioid misuse among justice-involved children. *Heroin Addict Relat Clin Probl*, 22(6), 15-23.

MANUSCRIPTS IN PREPARATION

Clerjuste, S. N., Barbieri, C.A., Jansen, A. (in prep). The Unique and Combined Effects of Feedback and Revision on Mathematics Performance. [working title].

Barbieri, C.A., **Clerjuste, S.N.**, Silla, E.M., & Chawla, K. (in prep). Leveraging common mathematical errors to support core mathematics competencies.[working title]

Clerjuste, S.N., Miller-Cotto, D., McNeil, N., Guang, C. (in prep). Developing a Model for Understanding Performance on Distributive Property Problems. Special issue in Journal of Experimental Child Psychology.

HONORS AND AWARDS

Recipient, NSF Graduate Research Fellowship Program (\$138,000) Sept 2022-Present

- Proposal: The Unique and Combined Effects of Process-Oriented Feedback and Revisions on Middle Schools' Fraction Arithmetic Performance

School of Education and Graduate College Travel Award Apr 2022-2023

- University of Delaware conference travel award.

Graduate Scholar Award (\$56,000)

Sept 2020-Aug 2022

- Participated in research in Dr. Christina Barbieri's Lab (see **Research Experience**).

Recipient, University of Florida (UF) Graduate School Preparatory Ph.D. Program (\$3000)

Aug 2018-May 2020

- Participated in graduate school preparations including research production with a current UF faculty member, attended GRE prep courses, presented at research conferences (National Conference for Undergraduate Research, College on Problems on Drug Dependence Conference), and received mentorship from graduate students.
- Currently mentor incoming junior and sophomore students in the program.

University of Florida's AIM Program, AIM Director's Award (\$3500)

Apr 2019

- Awarded for demonstrating leadership inside and outside of school.
- Participated in graduate school preparations including research production with a current UF faculty member, attended GRE prep courses, presented at research conferences (National Conference for Undergraduate Research, College on Problems on Drug Dependence Conference), and received mentorship from graduate students.
- Currently mentor incoming junior and sophomore students in the program.

University of Florida's AIM Program, AIM Director's Award (\$3500)

Apr 2019

- Awarded for demonstrating leadership inside and outside of school.

Excellence in Scholarship Award, University of Florida

Feb 2019

- Awarded during Study of Teen Opioid Misuse and Prevention (STOMP) Lab Symposium for demonstrating strong leadership and mentoring other students in STOMP lab.

NATIONAL CONFERENCE PRESENTATIONS

- Bailes, L. P., Clerjuste, S. (April 2023). *Assistant principals' practical and cognitive resources: task assignment, psychological needs satisfaction, and promotion to the principalship*. Presented at the American Educational Research Association(AERA) 2023 Annual Meeting, Chicago, IL.
- Clerjuste, S., Barbieri, C.A., Jansen, A., & McCoy, M. (April 2023). *Opportunity to Revise: Effects of Corrective or Directive Feedback on Fraction Arithmetic Performance*. Presented at the American Educational Research Association (AERA) 2023 Annual Meeting, Chicago, IL.
- Miller-Cotto, D., Barbieri, C.A., Clerjuste, S., Chawla, K., Le, P.H., DeLuca, L., & Landy, J. (April 2023). *A Meta-Analysis Exploring the Effect of Worked Examples on Mathematics Performance*. Presented at the American Educational Research Association (AERA) 2023 Annual Meeting, Chicago, IL.
- Clerjuste, S. N., Chawla, K., Miller-Cotto, D., Barbieri, C.A., McKinney, G., & O'Neill, L. (April 2022). *A Meta-analysis on the worked examples effect on mathematics performance*. 2022 Cognitive Development Society (CDS) Conference. Madison, WI.
- Chawla, K., Clerjuste, S., Miller-Cotto, D., Barbieri, C.A., McKinney, G., & O'Neill, L.

(September 2021). *A Meta-analysis on the worked examples effect in mathematics*. Society for Research on Educational Effectiveness (SREE) 2021 Conference, Washington, D.C.

Chawla, K., Clerjuste, S., Barbieri, C.A., Miller-Cotto, D., Le, P.H., O'Hara, E., & Landy, J. (August 2021). *Meta-analysis on the worked examples effect in mathematics*. SOURCE Summer Talk Series, University of Delaware.

Clerjuste, S. N., Barbieri, C.A., Jansen, A. (May 2021). *The Unique and Combined Effects of Feedback and Revision on Mathematics Performance*. 2021 American Psychological Sciences (APS) Virtual Convention.

Clerjuste, S. & M. Johnson (February 2020). *The association between somatic complaints and past 30-day opioid misuse among justice-involved children*. 2020 McKnight Mid-Year Research and Writing Conference.

Clerjuste, S. & M. Johnson (June 2019). *The association between somatic complaints and past-30-day opioid misuse among justice-involved children*. The College on Problems on Drug Dependence Conference (CPDD)

Clerjuste, S. & M. Johnson (April 2019). *The association between somatic complaints and past-30-day opioid misuse among justice-involved children*. National Center on Undergraduate Research Conference (NCUR)

Clerjuste, S. & M. Johnson (February 2019). *The association between somatic complaints and past-30-day opioid misuse among justice-involved children*. STOMP Laboratory Symposium, University of Florida

DEPARTMENTAL PRESENTATIONS

Clerjuste, S. N., Barbieri, C.A., Jansen, A. (April 2023). *The Unique and Combined Effects of Feedback and Revision on Mathematics Performance*. 2023 Steele Symposium, University of Delaware.

Clerjuste, S. N., Chawla, K., Miller-Cotto, D., Barbieri, C.A., McKinney, G., & O'Neill, L. (April 2022). *A Meta-analysis on the worked examples effect on mathematics performance*. 2022 Steele Symposium, University of Delaware.

Clerjuste, S. N., Barbieri, C.A., Jansen, A. (April 2021). *The Unique and Combined Effects of Feedback and Revision on Mathematics Performance*. Steele Symposium, University of Delaware.

RESEARCH EXPERIENCE

Summer Pre-Doctoral Research Experience (SPRE) NAEP Intern, Educational Testing Services

Jun 2023- Jul 2023

- Mentors at ETS
 - Dr Hongwen Guo, Principal Research Scientist
 - Dr Christopher Agard, Director Client Management
 - Dr. Luis Saldivia, Senior Director
- Worked with National Assessment of Educational Progress (NAEP) process data, specifically focusing on 8th-grade math assessment process data.

- Created a new feature that identifies student revisions and changes in answers during the assessment process.
- Conducted data cleaning and preprocessing to ensure data quality and reliability.
- Utilized multinomial logistic regression for data analysis, extracting valuable insights from the NAEP data.
- Employed predicted probability plots to visualize and interpret the analysis results effectively.
- Gained proficiency in data analytics techniques and enhanced data interpretation skills.
- Developed a deeper understanding of ETS and NAEP's operations and objectives.
- Engaged in extensive networking, building professional relationships within the organization.
- Presented final project to NAEP officials : **Exploring Students Revisiting Patterns in The NAEP 2022 8th Grade Math Assessment**

Graduate Research Assistant, University of Delaware

Sept 2020- Present

1. GUR pilot intervention:
 - Designed materials for experimental intervention on elementary mathematics in, Dr. Christina Barbieri's Mathematical Cognition and Learning Lab
 - Researched mathematical misconceptions to target within intervention
 - Oversee undergraduate RA work
 - Conducted testing and training sessions with students at the College School
2. Meta-analysis on the worked examples effect on math performance:
 - Coded for effect size calculation through R programming
 - Coded study descriptors through excel
 - Assisted in writing conference proposal submitted to Society for Research on Educational Effectiveness (SREE) Conference and American Educational Research Association (AERA) Conference
 - Submitted for Publication
3. Revision study:
 - Developed preliminary proposal for independent study design
 - Designed materials for participants of the study
 - Submitted research proposal accepted for presentation at APS convention
 - First authored manuscript written on study

Undergraduate researcher, Virtual Learning Lab

Sept 2019-May 2020

- Analyzed survey data for Algebra Nation using statistical learning programming language R
- Used R for general linear model selection and fitting

Research Trainee, Study of Teen Opioid Misuse Prevention Laboratory (STOMP)

Jun 2018-May 2019

- Researched information such as overall opioid misuse and misuse among justice - involved children to explore the association between opioid misuse and somatic complaints among justice-involved children
- Analyzed and interpreted data using statistical learning program STATA
- Assisted others by showing them how to interpret their statistical results for their research in the STOMP lab

Rater, Study of Non-Oral Administration of Prescription Stimulants (SNAPS) Sept 2018

- Conducted research to investigate the prevalence and predictors of non-oral administration of prescription stimulants.
- Communicated and explained to adolescents the importance of participating in research.
- Administered surveys to persons of the ages 10-17-year-old throughout Tampa Florida.
- Contributed to the SNAPS team by assisting and encouraging other team members to complete their surveys.

ADDITIONAL TRAINING

External workshops in Quantitative Methods

Categorical Data Analysis- Statistical Horizons Jul 2023

- Instructor: Dr Trenton Mize
- 4-day live stream seminar in applied statistics that primarily deals with regression models in which the dependent variable is binary, nominal, ordinal, or count.

Motivation in Spatial-Temporal Math (MIST) Workshop Jun 2021-Aug 2021

- Instructors: Dr. Teomara Rutherford, Dr. Kerry Duck
- Worked with and analyzed large data sets
- Received R programming training

AERA Meta-Analysis Training Workshop Feb 2021

- Instructors: Dr. Terri Pigott, Dr. Joshua R. Polanin, & Dr. Ryan Williams

AERA Advanced Meta-Analysis Training Workshop Apr 2021

- Instructors: Dr. Terri Pigott, Dr. Ryan Williams, Dr. Tasha Beretvas, & Dr. Wim Van Den Nortgate

TEACHING EXPERIENCE

Teaching Apprenticeship, University of Delaware Feb 2023-May 2023

- Teaching Assistant for Introduction to Statistical Inference Course
- Graded homework assignments, exams, and quizzes.
- Completed R demos in class and assisted students with R in class.

Haitian Creole Math Content Developer, Math Nation (Remote) May 2022-Present

- Create and translate math lesson videos in Haitian Creole

Co-Course Developer, University of Delaware Jan 2022-Feb 2022

- Assisted in the creation/design of Introduction to Statistical Inference Course
- Created R code and class assignments for course development

Math Tutor, UF Teaching Center Mar 2018- May 2020

- Tutored college students in calculus one, college algebra, trigonometry, and lower-level math courses.
- Created and lead exam reviews for over 200 students.
- Mentored students and encouraged long term growth through weekly one-on-one appointments.

Tutor, Micanopy Library, Gainesville Fl

2016

- Assisted elementary and middle school students in different subjects to enhance reading, writing, and mathematics skills.

LEADERSHIP & SERVICE

ESRM PhD Student Representative, CEHD Graduate Programs Virtual Open House

Nov 2021

- Represented the Education Statistics and Research Methods PhD program by speaking to prospective students and providing information on the program.

Assistant Instructor, Projects 4 Haiti Impact Trip

June 2019

- Planned and engaged in sustainable development programs ranging from youth leadership development, children’s activities, health education, and learning the English language.
- Conducted Youth Leadership Development workshops for young adults.
- Taught Haitian Creole courses for non-creole speakers prior to the impact trip and served as a translator between creole-speakers and non-creole speakers during the trip.

External Vice President, UF Haitian Student Association (HSA), (Club Creole)

May 2018- May 2019

- Organized trips/events outside of the University of Florida and encouraged students to join the organization.
- Contributed to the organization’s success by cooperating with other E-board members to provide a welcoming community for students in the organization.
- Communicated frequently with other HSAs within Florida universities to promote unity among all the HAS’s across Florida.

Volunteer, Georgia Farmworker Health Clinic

June 2018

- Assisted as a Haitian Creole interpreter for Haitian farm workers who needed medical help.
- Contributed to the well-being of the farmers by explaining to the doctors everything that they were concerned about.

PROFESSIONAL AFFILIATIONS

Cognitive Development Society (CDS)

Association for Psychological Science (APS)
American Educational Research Association (AERA)
National Council on Measurement in Education (NCME)

SKILLS

Haitian Creole: Native Language

French: Intermediate Listener, Intermediate Speaker, Novice Reading, and Writing

Programming: R Programming, SPSS, Microsoft Excel

