

YINING LU

New York University | +1 551-554-8199

yl11897@nyu.edu

EDUCATION

New York University

September 2023 – Expected June 2025

Masters of Applied Statistics for Social Science Research

GPA: 3.95/4.00

Awards & Honors:

Global Citizen Scholarship

Core Courses:

Causal Inference, Modern Approaches in Measurement, Generalized Linear Models and Extensions, Messy Data and Machine Learning, Experimental & Quasi Experimental Design, Multi-Level Modeling: Nested Data/Longitudinal Data, Frequentist Inference

The Chinese University of Hong Kong, Shenzhen (CUHKSZ)

September 2019 – June 2023

Bachelor of Statistics, Data Science track

GPA: 3.27/4.00

Awards & Honors:

AY 2021 – 2022 Dean's List

2022 Undergraduate Research Award

Core Courses:

Discrete Mathematics, Statistical Inference, Optimization, Categorical Data Analysis, Data and Knowledge Management, Time Series

PEER-REVIEWED PUBLICATIONS

Articles in peer reviewed journals

Lu, Y., Harel, D., Kanopka, K., Thombs, B.D. (In preparation). Developing and evaluating scoring methods for function: A Scleroderma Patient-centered Intervention Network (SPIN) Cohort Study. *To be submitted to Arthritis Care and Research*.

He, J., **Lu, Y.**, Barnhart, W. R., Tang, C., Zhang, H., Zhao, Y., & Lin, L. (2023). Translation and validation of a Chinese version of the body talk scale for women and men. *Journal of Eating Disorders*, 11(1), 153.

Barnhart, W. R., Cui, T., Zhang, H., Cui, S., Zhao, Y., **Lu, Y.**, & He, J. (2023). Examining an integrated sociocultural and objectification model of thinness-and muscularity-oriented disordered eating in Chinese older men and women. *International Journal of Eating Disorders*, 56(10), 1875-1886.

Conference Presentations

Lu, Y., Huang, Y., & Kanopka K. (2025). Assessing the Representativeness of LLM-Generated Item Responses Using Latent Class Analysis. Accepted for presentation as part of a Paper Session at the Annual Meeting of the National Council on Measurement in Education.

ACADEMIC PROJECTS

Research Assistant, Simulating Survey Respondents using Large Language Models, NYU

PI: Professor Klint Kanopka, NYU

March 2024 – present

- Designed and executed comparative studies analyzing Large Language Model (LLM) responses against human behavioral data to evaluate representational accuracy and behavioral patterns of LLMs.
- Conducted advanced statistical analyses, including Latent Class Analysis (LCA) and polychoric correlations, to evaluate the consistency of LLM-generated responses with demographic and psychometric profiles derived from real-world survey data.
- Assessed response divergence through measures such as the magnitude of divergence, identifying key trends and anomalies in model behavior.
- Wrote a research proposal for the National Council on Measurement in Education (NCME), contributing to emerging insights on the limitations and capabilities of LLMs in behavioral modeling.

Research Assistant, **Development of HAQ Scoring Methods, NYU**

June 2024 – present

PI: Professor Daphna Harel, NYU

- Spearheaded the development and evaluation of scoring methods for functional disability assessments, including the original Health Assessment Questionnaire (HAQ) and newly developed scoring models based on Item Response Tree, to enhance the validity and reliability of functional disability measurements.
- Drafted and implemented research protocols to facilitate data access and ensure compliance with ethical standards, contributing to the Scleroderma Patient-centered Intervention Network (SPIN) cohort study.
- Conducted in-depth comparative analyses to evaluate the convergent validity, concurrent validity, and test-retest reliability of both traditional and newly developed scoring methods, demonstrating improvements in measurement consistency and sensitivity to assistive device usage.
- Evaluated the validity of scoring models through statistical analysis, using equivalence test to assess the correlations with external health measures such as the PROMIS Physical Function Scale.

Research Assistant, **Item Response Warehouse**

January 2024 – present

PI: Professor Ben Domingue, Stanford University

- Contributed to the ongoing development of the IRW, a resource designed to facilitate research in education and social sciences by making standardized item response data accessible for researchers worldwide.
- Conducted literature review to ensure data suitability for item response theory application, validating methodology and enhancing project credibility.
- Perform data cleaning and transformation tasks, standardizing large datasets for IRT application, improving the efficiency of psychometric data analysis.

Research Assistant, **Path Program, NYU**

January 2024 – present

PI: Professor Elise Cappella, NYU

- Facilitated the inclusion of students with emotional disabilities and diverse backgrounds in NYC public schools, contributing to equitable education initiatives.
- Conducted comprehensive literature reviews on evidence-based practices to support program development, providing critical insights that shaped the program's strategy.
- Collected and analyzed survey data from social workers and teachers, integrating feedback into program evaluations and recommendations for future improvements.
- Led qualitative analysis of interview and questionnaire data, providing actionable insights on the effectiveness of program interventions in fostering positive student outcomes.
- Cleaned and analyzed program data, producing detailed reports that informed program success and identified growth opportunities, supporting the scaling of the Path program across multiple NYC schools.

Research Assistant, **Body Talk and Disordered Eating Behaviors, CUHKSZ**

August 2022 – April 2023

PI: Professor Jinbo He, CUHKSZ

- Led a cross-cultural research study aimed at adapting the Body Talk Scale (BTS) into Chinese, focusing on body talk's role in body image and eating disorders
- Co-authored a research paper on the translation and psychometric validation of the Chinese BTS, now published in the *Journal of Eating Disorders*, after receiving the Undergraduate Research Award.
- Designed a comprehensive questionnaire incorporating ten additional scales, gathering 600 responses from diverse platforms to examine body talk and disordered eating behaviors.
- Performed statistical analyses to validate the psychometric properties of the scale, including factor structure, reliability, and validity assessments across genders.

Course Designer & Data Analyst, **Body Imagery Intervention for Middle Schoolers, CUHKSZ**

PI: Professor Jinbo He, CUHKSZ

September – December 2022

- Conducted large-scale pre- and post-intervention surveys with 1,000 students, analyzing the impact of a body confidence curriculum using R and Excel to assess changes in body appreciation and self-compassion.
- Designed an interactive course focused on promoting body confidence, incorporating evidence-based activities centered around body appreciation and self-compassion.
- Successfully piloted the program, leading to its future integration into regular psychology curriculum.

TEACHING

*Teaching Assistant, **Basic Statistic Course**, NYU*

September 2024– present

- Graded homework for two course sections comprising approximately 60 students, ensuring timely feedback and precision in evaluating student performance.
- Held weekly office hours, offering personalized guidance and clarification of statistical concepts to improve student comprehension and engagement.
- Assisted the instructor in facilitating classroom discussions, managing activities, and reinforcing key statistical principles through problem-solving sessions.

INTERNSHIPS

*Data Analyst, **Department of Big Data Platform, National High-Tech Industrial Innovation Center**,
Shenzhen, China*

May – August 2022

- Analyzed potential collaborative projects between Shenzhen and Hong Kong, producing a comprehensive report with actionable recommendations to enhance cross-border innovation.
- Supported the development of an industrial innovation information platform, performing data cleaning and modeling tasks to streamline the platform's functionality.
- Supported the development of an industrial innovation information platform, performing data cleaning and modeling tasks to streamline the platform's functionality.
- Collaborated with product managers to identify system development needs, ensuring alignment between data analysis and platform functionalities.

TECHNICAL SKILLS

Programming Languages: Python, R, C++, JavaScript, SQL

Software: RStudio, Stata, SPSS, MySQL, MATLAB, POWER BI, Tableau