

Jiayi Zhou

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Portfolio— LinkedIn— Google Scholar

SUMMARY

Applied Behavioral Data Scientist specializing in large-scale survey analytics, social network modeling, and behavioral signal interpretation. Experienced in transforming complex psychological and relational data into operational metrics that inform product understanding, user segmentation, and strategic decision-making. Strong expertise in longitudinal behavioral modeling, measurement design, and uncovering hidden interaction dynamics within complex systems.

CORE SKILLS

Behavioral Analytics & Segmentation: User behavior analysis; survey-based analytics; latent construct operationalization; heterogeneous pattern detection; behavioral signal engineering
Statistical Modeling: Regression; multilevel modeling; SEM; trajectory analysis; panel modeling; measurement validation
Social Network & Relational Modeling: Network analysis; peer influence modeling; interaction graph construction; exposure pathways; system-level behavioral dynamics
Data & Programming: R, Python, SQL, Mplus, SPSS; reproducible pipelines; large-scale data cleaning and feature construction
Insight Communication: Analytical storytelling; cross-functional collaboration; translating behavioral signals into actionable insights

EDUCATION

University of Pennsylvania PhD, Human Development & Quantitative Methods Focus: Psychometrics, longitudinal modeling, network analytics	Aug 2021–May 2026 (expected)
University of Pennsylvania M.S.Ed., Human Development & Quantitative Methods	Aug 2019–May 2021
Beijing Normal University B.A., Education	Sep 2015–Jun 2019

RELEVANT RESEARCH EXPERIENCE

Applied Quantitative Researcher <ul style="list-style-type: none">Analyzed large-scale behavioral survey datasets to uncover interaction patterns, social dynamics, and engagement signals.Designed measurement-driven analytics translating latent psychological constructs into scalable behavioral metrics.Built behavioral segmentation frameworks identifying heterogeneous patterns across populations and interaction contexts.Modeled relational structures using social network analytics to understand influence pathways and behavioral diffusion.Delivered insight-driven analyses informing strategic decision-making under ambiguity.	University of Pennsylvania, 2019 – Present
Quantitative Consultant (Academic Collaboration Projects)	University of Pennsylvania, 2020 – Present

- Advised interdisciplinary teams on experimental design logic, measurement strategy, and applied modeling approaches for non-randomized field data.
- Supported partner teams in interpreting complex statistical outputs and transforming analytic results into actionable recommendations.

SELECTED BEHAVIORAL ANALYTICS RESEARCH

- **Behavioral leadership signals do not always reflect underlying competence.** Demonstrated divergence between visibility-based metrics and substantive behavioral outcomes using social network modeling and measurement-driven analysis. *Zhou et al., Journal of Youth and Adolescence (2024)*
- **Relational structures shape behavioral outcomes beyond individual traits.** Applied social network analytics to reveal how interaction structures influence system-level adjustment patterns and behavioral performance signals. *Zhou et al., Journal of Early Adolescence (2025)*