Applied Analytics and Data Infrastructure Catalyst Program

Available Supports — FY 2024-25

Contact us to discuss supports that may not appear on this list.

Applied Analytics

1. Analysis

- · Performing descriptive and inferential analyses.
 - Analytic methods may include but are not limited to: general/generalized linear modeling, mixed modeling (i.e., multilevel or hierarchical linear modeling), latent variable modeling (e.g., structural equation modeling, item response theory, and factor analysis), and mediation and moderation analysis.
- Using complex survey analysis methods to analyze data from large-scale national and international survey studies (e.g., ECLS, NAEP, PISA).
- Conducting qualitative data analysis.
- Guiding the integration procedures for mixed methods studies.

2. Measurement Services

- Evaluating existing psychometric data to appraise the degree of reliability and validity evidence for existing measure(s).
- Psychometric analyses (e.g., factor analysis, reliability analysis) for a measure.
- Supporting best practices for measure development in areas such as item writing, general design and administration.
- Developing appropriate qualitative data collection protocols for the study design.

3. Dissemination

- Creating appropriate visual data displays.
- Collaborating on the preparation of manuscripts.

Data Infrastructure

1. Database Development

- Creating Qualtrics surveys for online data collection.
- Building customized data systems for individual projects, including survey and data entry portals, and custom data reports for analytic use.
- Integration of various software (e.g., Qualtrics) into customized project websites.
- Ensure methods for secure data transfer from field-based research sites.



2. Data Management

- Data cleaning (e.g., flagging errant data patterns, naming variables, merging datasets), creating composite variables (scoring measures).
- Best practices data/statistical software (e.g., SPSS, SAS, Mplus, R) training for GRAs and project staff.

3. Data Curation Consultation

Data curation is the ongoing processing and maintenance of data throughout its life cycle to ensure data quality and long-term accessibility, sharing and preservation. Individual consultations are scheduled as a series of one-hour virtual meetings and thus intended for giving feedback; sharing resources related to research methods, applied analytics, data infrastructure, data preparation for depositing to a repository (e.g., NIH National Data Archive); or providing advice on registering a study (e.g., clinicaltrials.gov, REES). You will have a chance to share any relevant documents in advance. You will meet with members of our team. Following the consultation, we will provide you with a summary of the consultation and a list of resources specific to your research.

Note: Data curation consultations do not include proposal development. Please contact Julie Gillmor at <u>julie.gillmor@unl.edu</u> for information regarding proposal development.

Supports are provided on an hourly basis. Service center rates are determined annually by the University of Nebraska–Lincoln.

Current rates:

Research Faculty: \$85/hour
Research Staff: \$59 - \$74/hour

• Graduate Research Assistants: \$49/hour