

CHAD Center on Health, Aging, and Disability

Biostatistical Support



Grant Proposal

Analytic Plan

Sampling Design

- Randomization
- Sample Matching (case-control; propensity score)

Power and Sample Size Calculation

- Group Comparison on Means/Proportions
- Analysis of Variance/Covariance
- Repeated Measures Analysis of Variance/Covariance
- Linear Regression
- Logistic Regression
- Mediation/Moderation Effect
- Structural Equation Models
- Longitudinal Data
- Growth Curve Models
- Mixed Effect Models

Database Management

Statistical Modeling

Data Analysis

Manuscript/Presentation/Abstract

- Statistical Methodology
- Data Analysis
- Result

Data analysis

Psychometric Analysis

- Internal Consistency
- ROC Analysis
- Factor Analysis (EFA; CFA)
- Item Response Theory
- Multi-group Analysis

Cross-sectional Data Analysis

- Descriptive Analysis
- Group Comparisons
- Analysis of Variance/Covariance
- Linear Regression
- Logistic Regression
- Multivariate analysis
- Categorical Data Analysis
- Factor Analysis
- Generalized Linear Modeling
- Mediation/Moderation Analysis

Survival Analysis

- Propensity Score Analysis
- Analysis On Cluster Data
- Structural Equation Modeling
- Path Analysis
- Latent Class Analysis
- Latent Growth Analysis
- Hierarchical Linear Modeling
- Multilevel Modeling on Complex Survey Data

Longitudinal Data Analysis

- Generalized Estimating Equations
- Repeated Measures Analysis of Variance/Covariance
- Mixed Effect Models
- Generalized Growth Mixture Models

Missing Data Imputation

- Maximum Likelihood Estimation
- Multiple Imputation

Clinical Trials

- Intent-to-treat Analysis
- Last Observation Carried Forward
- Efficacy Analysis
- Adverse Events

Genetics

- Genome-wide Linkage Analysis
- Family-based Association Analysis

Statistical Software

- SAS/SPSS/MPlus/STATA/Matlab/S-plus
- Power Calculation (SAS, Mplus, GPower, PASS, etc)
- Dataset Conversion

And any other hypothesis-based statistical analysis

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