

Statistics 467/567 – Applied Multivariate Methods

Project No. 2 – Additional Variables or Recoded Variables or Factor Scores

Instructions and Questions to Consider

Abstract

- Include additional variables, revised methods and new findings

Introduction

- Update literature review with resources (articles, books, etc.) pertinent to the added measures or variables

Methods Section

- New variables – explain how measured, recoded, with range and minimum and maximum

Results Section

- New univariate analysis for each variable added or factor created
- New bivariate – correlation matrix
- New variance-covariance matrix
- Multivariate models – run the analyses with new variables; if factor score is used as a variable (combination of variables), do not include the variables that comprise the factor. Only include the factor score in the model.
- Factor scores as a single variable capturing variance can be inserted in Linear Regression, Logistic Regression, Discriminant Analysis and Cluster Analysis.

Discussion

- How do the additional variables contribute to the explanatory power of the model? Did the bivariate correlation matrix values change (significance level of $p < .05$ considered) with the additional variables. Were some variables eliminated or replaced with the additional variables. Did the variance-covariance matrix values increase or decrease with the additional or substituted variables?