Summary for Exploratory Meta Analysis on Uniform Assessment Battery across Aging Studies

Introduction

This summary file provides an overview of the exploratory meta analysis across different aging studies. Five components files plus this summary will be needed to run the SAS MACRO and the MATLAB function properly. The programs were originally written to analyze a set of "common assessment battery" of physical performance and biomarkers within Wake Forest University Health Sciences Pepper Center. The sample data used in this package is simulated data and for demonstration only. The relevant published work is referred if applicable.

Using the SAS output, bubble plots with bubble size proportional to sample size can be produced in MATLAB (unfortunately with SAS 9.1 we could not figure out an efficient way to plot the same). Therefore MATLAB were used. You may also use any other favorite graphic software to make the plots.

Keyword Categories

Clinical: Aging, Cross-sectional, physical performance, functional disability

Genetics: N/A

Statistical: meta-analysis, multiple linear regression, covariate adjustment

Software: SAS, MATLAB

Related: bubble plot, report table

Component Files

- 1 Copyright Notice and Disclaimer (pdf file)
- 2 Document: interpreting the methods, data structure, examples and output (pdf file)
- 3 SAS program
- 4 Sample data set
- 5 SAS output (.rtf)
- 6 MATLAB program (to plot bubble plots)
- 7 Wiki Article

http://grasp.med.yale.edu/wiki/Exploratory Meta Analysis on Uniform Assessment_Battery_across_Aging_Studies

Prerequisites

Basic SAS and SAS MACRO knowledge is required to run the program (MACRO) properly. If you need to know about SAS to run the program, SAS online documentation is available at http://support.sas.com/91doc/docMainpage.jsp

Basic MATLAB and MATLAB function knowledge is required to run the bubble plot package properly. More information about MATLAB can be found at http://www.mathworks.com/access/helpdesk/help/techdoc/

Potential Applications

If a set of continuous outcomes and continuous predictors are available in different studies and if it is of interest to study the relationship between the outcomes and predictors across the studies and see whether the results are consistent, this package provide a quick and simple analysis tool to complete such task.

For continuous outcomes and categorical predictors, modification of the SAS codes will be necessary, but should not be difficult.

Categorical outcomes are not covered in this package.