Advanced Survey Data Analysis for Categorical and Rating Scale Data

EPSY 5245

Assignment 3: Item Response Theory

For this assignment you can use the data available on the course website or use data of your own. You can use the liking-science-cf.txt control file as a model. But first, it will be helpful to see if you can simply run that control file in Winsteps.

Once you can run Winsteps and successfully obtain output, select a set of items that constitute a measure of “something.”

Follow these steps to complete the assignment:

1. Identify the set of items you will use for the assignment, provide a brief table with the items listed, and briefly describe the construct of which they are a measure.
2. Create and submit the Winsteps control file with the assignment.
3. Run the control file in Winsteps
   1. After the first prompt, “control file name?”, hit the enter key to get a prompt that allows you to locate the “your-control-file-name” document. It is easiest if this control file is in the same folder as Winsteps.
   2. Once you have selected the file, you should get another prompt, hit enter without typing anything, then hit enter again. The analysis should run (you will see lots of lines generated).
4. In the Tool Bar, you should click on Output Tables, and select
   1. Table 3.1 (summary statistics)
   2. Table 12.2 (item map)
   3. Table 13.1 (item statistics)
   4. Table 29.# (empirical and model ICCs)
5. Submit the following:
   1. Tables 3.1, 12.2, 13.1, and three tables from 29.# with a brief description of what you observe. Make two specific comments about each table.
   2. What can you say about the quality of the measure? What is your recommendation for future development or use?

To Save Persons Scores

1. In the Tool Bar, you should click on Output Files, and select
2. PFILE =

This creates either an SPSS or Excel file with person scores.