CORR-REL: A Program for Reliability Analysis and Optimal One-Factor Scaling

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1. INTRODUCTION

CORR-REL is a C++ program described in White (1990). The program offers four options. First, it can read a file containing a correlation matrix and calculate reliabilities of the variables. .Second, it can read a file containing raw data and compute a correlation matrix. The third option duplicates the second, but provides estimates of reliabilities produced by three procedures. The fourth option duplicates the third and creates a composite scale using optimal single-factor weights. The program can read raw data files created by MAPTAB and SORT programs as well as ASCII files with a space between variables. Output is displayed on the screen and posted to a user-named ASCII file.

2. PROGRAM OPERATION

Before running CORR-REL you must prepare and save a data file to disk. There are four data file formats (examples are on this disk): 1) a full square correlation matrix with a space between entries (see test1.dat); 2) a lower off-diagonal correlation matrix with a space between entries (see test2.dat); 3) a 2-column MAPTAB file (see test3.dat); 4) a raw data file with a space between each entry (see test4.dat and test5.dat). If you have a raw data file not created by MAPTAB and desire to assign your own society or variable numbers you must create two files: one containing a 'number of societies by 1' matrix containing society numbers and the other a 'number of variables by 1' matrix containing variable numbers (see test4.soc and test4.var). You do not need to create these extra files if you are willing to let the program number the societies and variables starting with one (see discussion of test5.dat below).

CORR-REL currently runs only in a Win32 environment. Further, screen clearing will not work correctly unless ANSI.SYS or ANSI.COM is operating. A copy of ANSI.COM is included on this disk. Type "ansi.com" to run (it will not run if ANSI.SYS is already operating). The easiest way to start CORR-REL is to use the run selection from the "START" tile in Windows95, browse to find corr-rel.exe and double click "OK."

3. REFERENCE

White, D. R.
1990   Reliability in comparative and ethnographic observations: The example of high inference father-child interaction measures. Journal of Quantitative Anthropology 2:109-150.