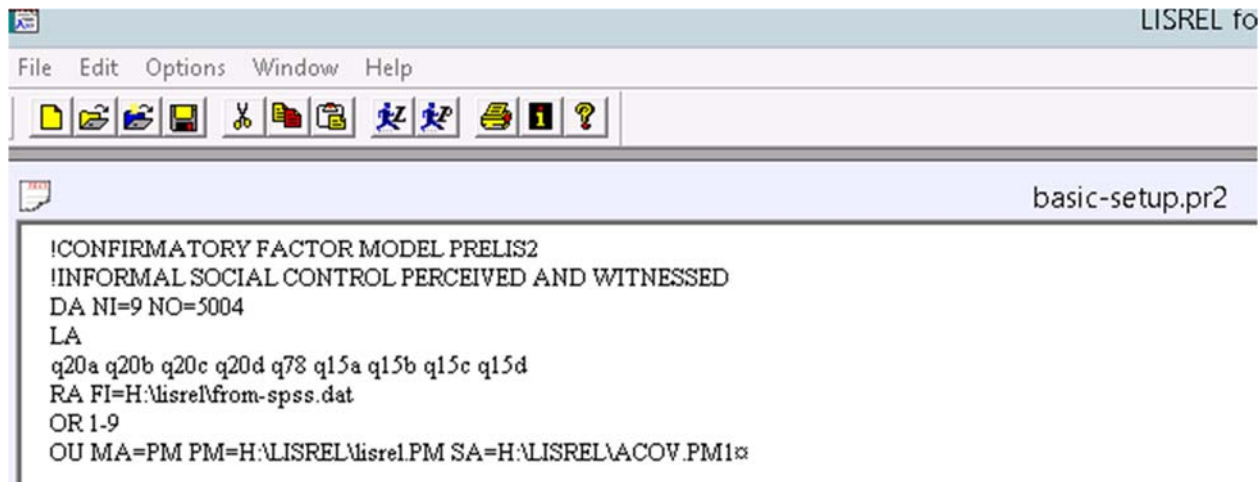



IMPORTING AN SPSS SAVE FILE INTO LISREL VIA PRELIS

PRELIS is a data preprocessor companion to the LISREL program. It allows you to read in data in various formats, conduct exploratory data analyses useful for SEMs, such as exploring missing data patterns, getting estimates of skewness and kurtosis for continuous variables, and computing bivariate plots of ordinal variables. It will also compute scale-specific moment matrices, including linear covariances and Pearson correlations, polychoric and polyserial correlations for ordinal data, and correlations among normal scores for continuous normally distributed observed variables that are censored from above, from below, or both.

There are a number of ways to read data into PRELIS and LISREL. The simplest way would be to read in a covariance or correlation matrix directly in the run stream and run models on the moment matrix. But, in general, we typically want more flexibility and want to read in the raw data file from a disk or folder. Here, we would import the data and then create a PRELIS system file *.psf to analyze in subsequent runs. For example, in a PRELIS run stream, you can read in a rectangular ascii data file that has observations in rows and variables in columns separated by blanks. The following PRELIS command file reads in a nine-variable dataset containing 5,004 observations; called "from-spss.dat" in my folder H:\lisrel\.



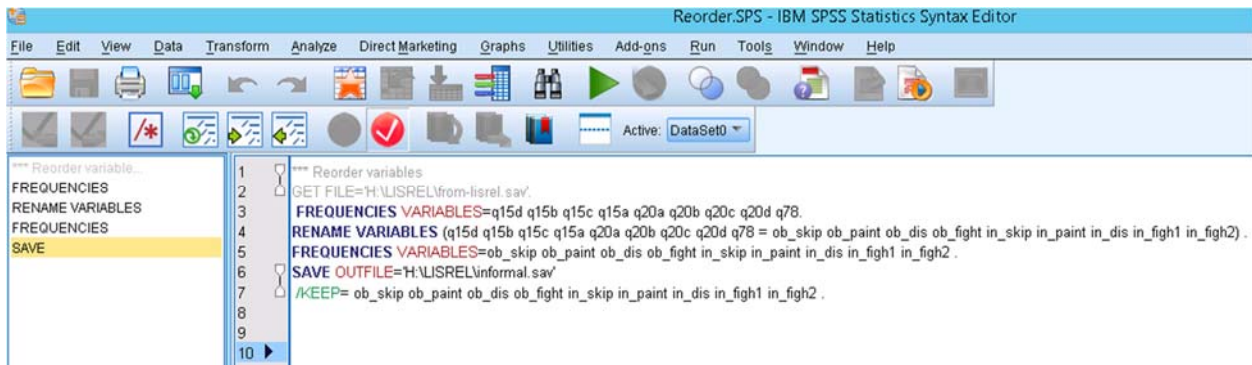
```
!CONFIRMATORY FACTOR MODEL PRELIS2
!INFORMAL SOCIAL CONTROL PERCEIVED AND WITNESSED
DA NI=9 NO=5004
LA
q20a q20b q20c q20d q78 q15a q15b q15c q15d
RA FI=H:\lisrel\from-spss.dat
OR 1-9
OU MA=PM PM=H:\LISREL\lisrel.PM SA=H:\LISREL\ACOV.PM1
```

The key line above is RA FI=H:\lisrel\from-spss.dat, which uses the keyword "RA" which stands for "RAW DATA" and "FI" refers to FILENAME, followed by = and the name of the folder and file that contains the data. To run this command file, you must first save the command file to a folder (I called this basic=-setup.pr2 (where pr2 is the keyword for PRELIS command file), and then click on the tab with little guy running toward a big "P" 

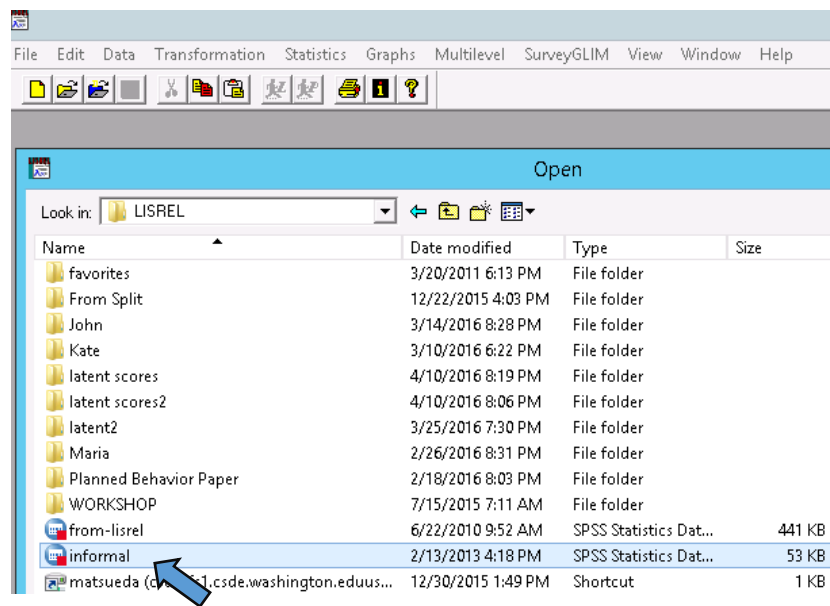
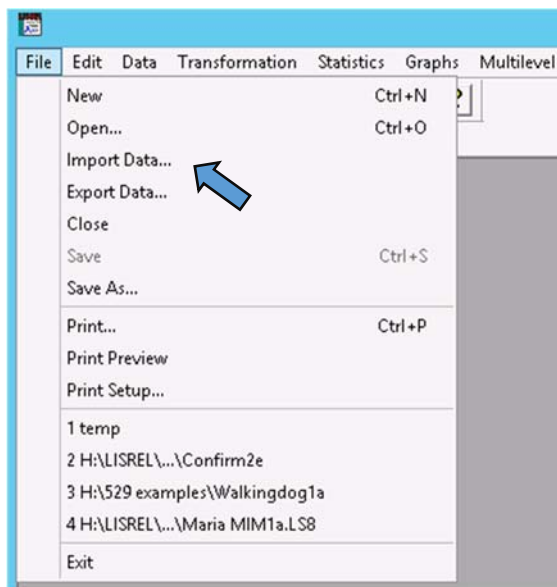
This run also treats all variables as ordinal, "OR 1-9" and computes a polychoric correlation matrix, and saving it as lisrel.PM and saving the asymptotic covariance matrix of the correlations to a file ACOV.PM1. a folder. If your data were written to an ascii file with a fortran format, you can read it in by specifying the format (see lecture notes and PRELIS manual.

PRELIS 2 also allows you to import data that are saved as system files in SPSS, SAS, and STATA. You may need to save SAS and STATA files in an earlier version of the programs. If this doesn't work, you can transfer them using STAT TRANSFER (if you have the full version), or import them into SPSS and save them as *.sav files and then use the following to read into PRELIS and create a .psf file.

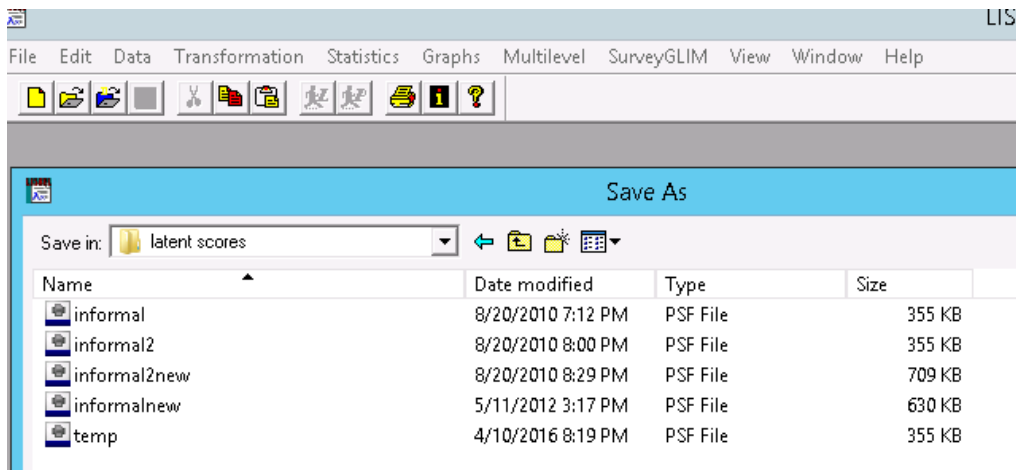
The following commands in SPSS read in a file of nine variables, q15d q15b q15c q15a q20a q20b q20c q20d q78, renames each variable, computes frequency distributions on each variable, and then saves the file (with new variables names) in an SPSS save file called informal.sav.



After saving the informal.sav SPSS system file, then open LISREL 8.8, and click on “file’ tab on the top bar, and click on “import data,” which should open a screen allowing you to browse for the file on your directory (see below left). Find the file folder H:\LISREL\ and then double click on the file informal.sav (see below right).



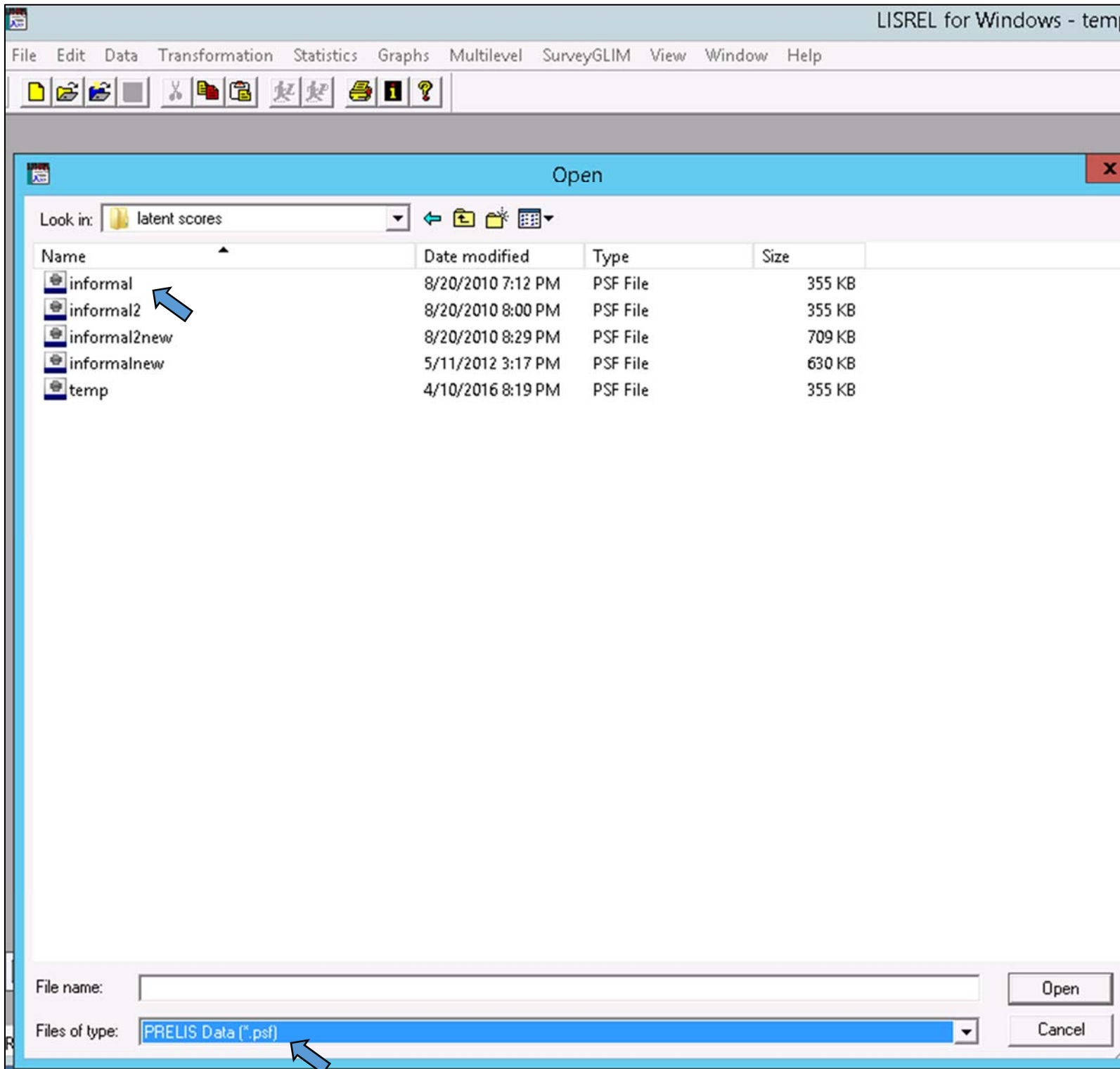
You should get a screen asking you where to save the new .psf file (see below).



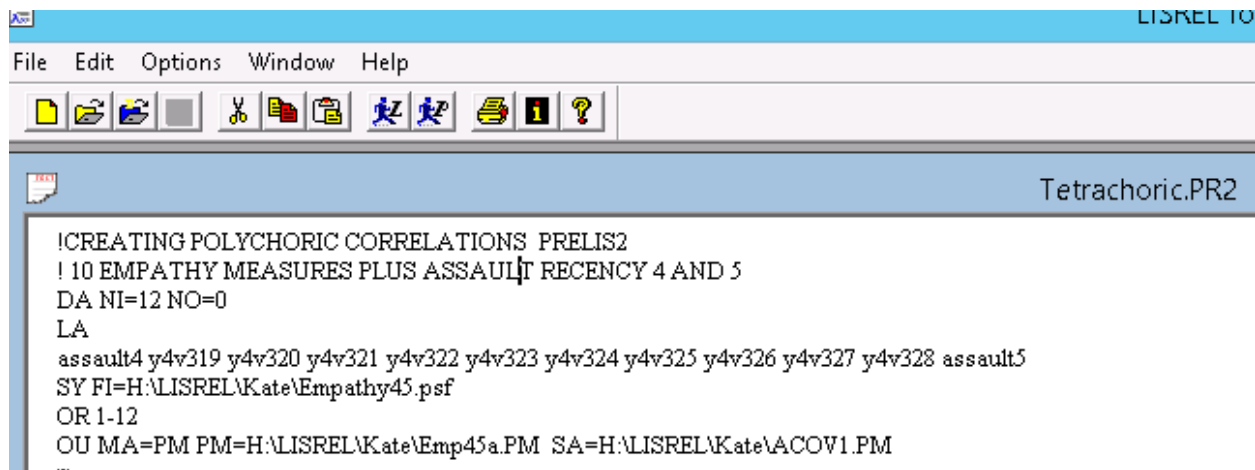
Select a folder and the file a name in the bottom box, and LISREL should open a .psf data file (readable in LISREL and PRELIS). It should look something like this:

	ob_skip	ob_paint	ob_dis	ob_fight	in_skip	in_paint	in_dis	in_figh1	in_figh2
1	0.00	0.00	0.00	0.00	3.00	4.00	3.00	4.00	3.00
2	0.00	0.00	0.00	0.00	3.00	4.00	2.00	3.00	3.00
3	1.00	0.00	0.00	0.00	2.00	3.00	2.00	4.00	4.00
4	0.00	0.00	0.00	0.00	2.00	3.00	3.00	3.00	2.00
5	0.00	0.00	0.00	0.00	3.00	4.00	3.00	3.00	3.00
6	0.00	0.00	0.00	0.00	3.00	4.00	2.00	3.00	3.00
7	0.00	0.00	0.00	0.00	2.00	3.00	3.00	3.00	2.00
8	0.00	0.00	0.00	0.00	4.00	4.00	3.00	3.00	4.00
9	0.00	0.00	0.00	0.00	3.00	4.00	3.00	3.00	3.00
10	0.00	0.00	0.00	0.00	3.00	3.00	2.00	4.00	3.00
11	1.00	0.00	0.00	0.00	2.00	3.00	2.00	3.00	3.00
12	1.00	0.00	0.00	0.00	1.00	2.00	1.00	3.00	2.00
13	0.00	0.00	0.00	0.00	3.00	4.00	3.00	4.00	3.00

When running future PRELIS or LISREL jobs, you can either load this file by clicking the “file” tab, then clicking “open,” (which is directly above the “import data” tab) and finding the folder and file. Be sure to click either “all files” or “PRELIS data *.psf files” in the bottom window, so it will show you *.psf files. The default is it will only show you *.ls8 and *.pr2 files:



Alternatively, you can include the *.psf file in the run stream (your command lines):



The screenshot shows the LISREL software interface. The title bar reads "LISREL TO". The menu bar includes "File", "Edit", "Options", "Window", and "Help". The toolbar contains icons for file operations (new, open, save, print) and editing (undo, redo, cut, paste). The main window title is "Tetrachoric.PR2". The command file content is as follows:

```
!CREATING POLYCHORIC CORRELATIONS PRELIS2
! 10 EMPATHY MEASURES PLUS ASSAULT RECENCY 4 AND 5
DA NI=12 NO=0
LA
assault4 y4v319 y4v320 y4v321 y4v322 y4v323 y4v324 y4v325 y4v326 y4v327 y4v328 assault5
SY FI=H:\LISREL\Kate\Empathy45.psf
OR 1-12
OU MA=PM PM=H:\LISREL\Kate\Emp45a.PM SA=H:\LISREL\Kate\ACOV1.PM
~
```

This PRELIS command file inputs 12 variables (“NI=12”), specifies number of observations as zero (“NO=0”), which asks PRELIS to calculate the sample size, and reads in a PRELIS *.psf file—which I already created in an earlier run. That file is denoted by keyword “SY” which stands for “SYSTEM FILE” with the file name following FI=, which in this example is called Empathy45.psf in the folder H:\LISREL\Kate\. This particular run defines all observed variables as ordinal and computes polychoric correlations and an asymptotic covariance matrix of the correlations (more on this in a couple of weeks) and saves them in separate files to be read into LISREL in a subsequent run.