Guttman Scalogram Analysis

Guttman scales are those measurement instruments composed of items which, ideally, form a hierarchy in which the total score of a subject can indicate the actual response (correct or incorrect) of each item. Items are arranged in order of the proportion of subjects passing the item and subjects are grouped and sequenced by their total scores. If the items measure consistently, a triangular pattern should emerge. A coefficient of "reproducibility" is obtained which may be interpreted in a manner similar to test reliability.

Dichotomously scored (0 and 1) items representing the responses of subjects in your data grid rows are the variables (grid columns) analyzed. Select the items to analyze in the same manner as you would for the Classical Item Analysis or the Rasch analysis. When you click the OK button, you will immediately be presented with the results on the output form. An example is shown below.

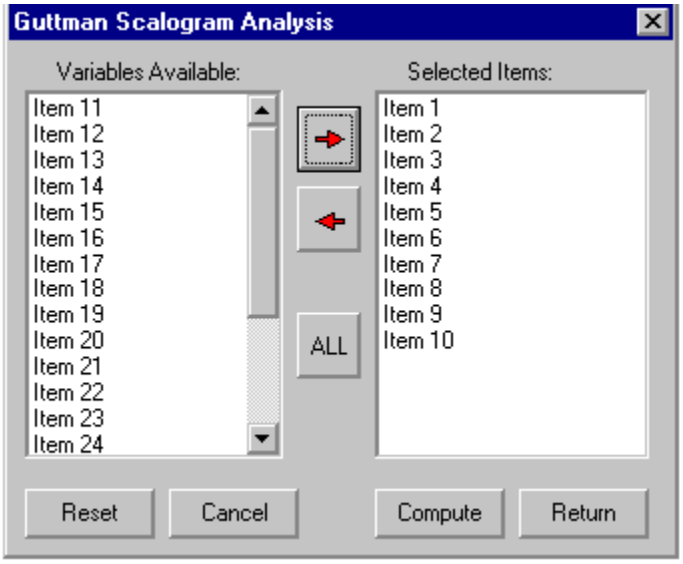

Figure 1 Guttman Scalogram Analysis Dialog

GUTTMAN SCALOGRAM ANALYSIS
Cornell Method

No. of Cases := 101. No. of items := 10
RESPONSE MATRIX

Subject Label	Row Sum	Item Number											
		Item 10		Item 9		Item 1		Item 3		Item 5		Item 2	
		0	1	0	1	0	1	0	1	0	1	0	1
1	10	0	1	0	1	0	1	0	1	0	1	0	1
6	10	0	1	0	1	0	1	0	1	0	1	0	1
20	10	0	1	0	1	0	1	0	1	0	1	0	1
46	10	0	1	0	1	0	1	0	1	0	1	0	1

68	10	0	1	0	1	0	1	0	1	0	1	0	1
77	10	0	1	0	1	0	1	0	1	0	1	0	1
50	9	0	1	0	1	0	1	1	0	0	1	0	1
39	9	1	0	0	1	0	1	0	1	0	1	0	1

etc.

TOTALS	53	48	52	49	51	50	51	50	50	51	48	53
ERRORS	3	22	19	9	5	20	13	10	10	10	10	13

Subject Row Item Number

Label	Sum	Item 8		Item 6		Item 4		Item 7	
		0	1	0	1	0	1	0	1
1	10	0	1	0	1	0	1	0	1
6	10	0	1	0	1	0	1	0	1

etc.

65	0	1	0	1	0	1	0	1	0
10	0	1	0	1	0	1	0	1	0
89	0	1	0	1	0	1	0	1	0

TOTALS	46	55	44	57	44	57	41	60
ERRORS	11	11	17	3	12	11	11	15

Coefficient of Reproducibility := 0.767