INDSCAL model in SPSS Proxscal

```
* Encoding: UTF-8.
TITLE SPSS PROXSCAL of Corter & Carroll (1990) statistical techniques similarities.
DATA LIST
  /1 MANOVA 1 multRegr 3 PCA  5 factor  7 canCorr 9 discrim 10 cluster 11 MDS 12 ANOVA 13 logLin 1
 logRegr 15.
BEGIN DATA

2
2 2
2 2 8
6 7 4 4
8 6 3 2 3
3 4 7 8 5 3
3 4 8 8 5 3 8
5 3 1 1 2 1 1 1
6 8 1 2 4 5 3 2 8
6 8 1 3 5 8 1 2 8 8

7
4 2
2 3 9
8 4 5 4
8 6 3 4 8
1 2 5 7 3 4
1 2 8 8 3 2 6
7 7 1 1 4 3 2 1
5 2 1 1 4 2 1 1 6
4 7 2 2 4 6 3 1 6 8

9
3 1
1 1 8
9 3 1 1
9 5 1 1 9
1 1 5 5 1 1
1 1 5 7 1 1 7
9 9 1 1 2 7 1 1
2 2 1 1 3 3 1 1 2
6 6 1 1 6 6 1 1 7 8
END DATA.

PROXSCAL VARIABLES=MANOVA multRegr PCA factor canCorr discrim cluster MDS ANOVA logLin
logRegr
 /SHAPE=LOWER
 /INITIAL=SIMPLEX
 /CONDITION=MATRIX
 /TRANSFORMATION=INTERVAL
 /PROXIMITIES=SIMILARITIES
 /MODEL=WEIGHTED
 /CRITERIA=DIMENSIONS(4,4) MAXITER(100) DIFFSTRESS(.0001) MINSTRESS(.0001)
 /PRINT=COMMON WEIGHTS STRESS
 /PLOT=COMMON WEIGHTS.
```

```
DATA LIST
    /1 MANOVA 1 multRegr 3 PCA  5 factor  7 canCorr 9 discrim 10 cluster 11 M
DS 12 ANOVA 13 logLin 14 logRegr 15.

Data List will read 1 records from the command file

Variable           Rec    Start      End  Format
MANOVA               1        1        1  F1.0
multRegr             1        3        3  F1.0
PCA                  1        5        5  F1.0
factor               1        7        7  F1.0
canCorr              1        9        9  F1.0
discrim              1       10       10  F1.0
cluster              1       11       11  F1.0
MDS                  1       12       12  F1.0
ANOVA                1       13       13  F1.0
logLin               1       14       14  F1.0
logRegr              1       15       15  F1.0
BEGIN DATA

2
2 2
2 2 8
6 7 4 4
8 6 3 2 3
3 4 7 8 5 3
3 4 8 8 5 3 8
5 3 1 1 2 1 1 1
6 8 1 2 4 5 3 2 8
6 8 1 3 5 8 1 2 8 8

7
4 2
2 3 9
8 4 5 4
8 6 3 4 8
1 2 5 7 3 4
1 2 8 8 3 2 6
7 7 1 1 4 3 2 1
```

```
5 2 1 1 4 2 1 1 6
4 7 2 2 4 6 3 1 6 8

9
3 1
1 1 8
9 3 1 1
9 5 1 1 9
1 1 5 5 1 1
1 1 5 7 1 1 7
9 9 1 1 2 7 1 1
2 2 1 1 3 3 1 1 2
6 6 1 1 6 6 1 1 7 8
END DATA.


PROXSCAL VARIABLES=MANOVA multRegr PCA factor canCorr discrim cluster MDS ANO
VA logLin logRegr
  /SHAPE=LOWER
  /INITIAL=SIMPLEX
  /CONDITION=MATRIX
  /TRANSFORMATION=INTERVAL
  /PROXIMITIES=SIMILARITIES
  /MODEL=WEIGHTED
  /CRITERIA=DIMENSIONS(4,4) MAXITER(100) DIFFSTRESS(.0001) MINSTRESS(.0001)
  /PRINT=COMMON WEIGHTS STRESS
  /PLOT=COMMON WEIGHTS.
```

Proxscal

Credit

Proxscal
Version 1.0
by
Data Theory Scaling System Group (DTSS)
Faculty of Social and Behavioral Sciences
Leiden University, The Netherlands

Case Processing Summary

Cases		33
Sources		3
Objects		11
Proximities	Total Proximities	165[a]
	Missing Proximities	27
	Active Proximities[b]	138

a. Sum over sources of all strictly lower-triangular proximities.

b. Active proximities include all non-missing proximities.

Goodness of Fit

Stress and Fit Measures

Normalized Raw Stress	.01283
Stress-I	.11325[a]
Stress-II	.47661[a]
S-Stress	.04559[b]
Dispersion Accounted For (D.A.F.)	.98717
Tucker's Coefficient of Congruence	.99357

PROXSCAL minimizes Normalized Raw Stress.

a. Optimal scaling factor = 1.013.

b. Optimal scaling factor = .984.

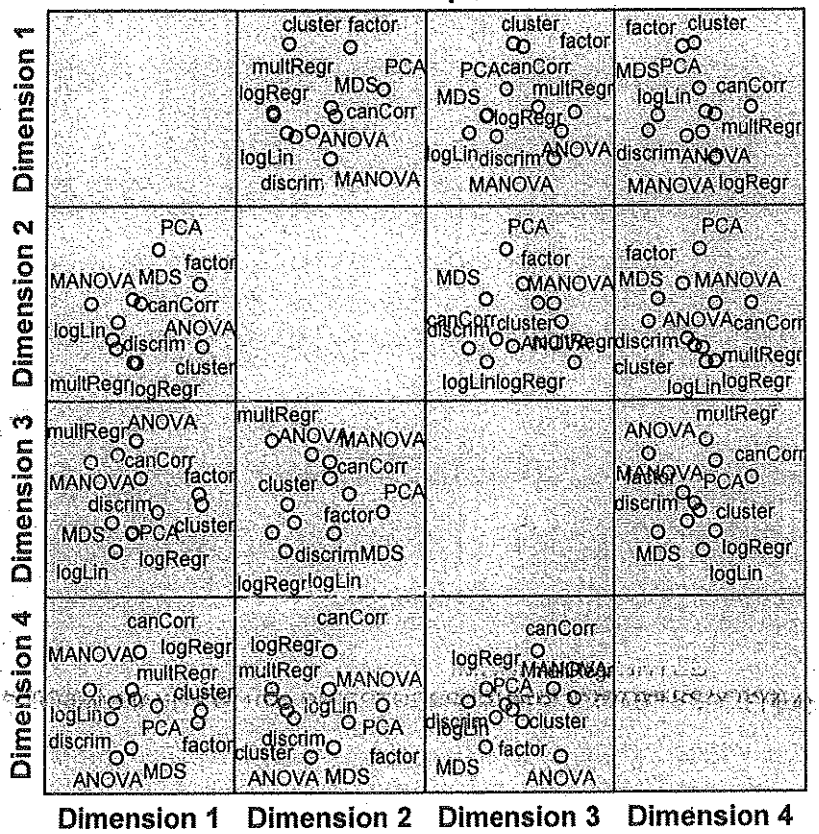
Common Space

Final Coordinates

	Dimension			
	1	2	3	4
MANOVA	-1.476	.480	1.070	.692
multRegr	-.118	-1.252	1.689	.350
PCA	.555	2.083	-.385	.111
factor	1.790	1.055	.131	-.512
canCorr	.023	.490	.596	2.065
discrim	-.832	-.569	-.694	-.351
cluster	1.880	-.777	-.169	-.076
MDS	-.227	.612	-1.011	-1.428
ANOVA	-.673	-.059	1.284	-1.776
logLin	-.721	-.832	-1.530	.231
logRegr	-.202	-1.230	-.980	.694

Object Points

Common Space



Page 5

Individual Spaces

Dimension Weights

Source	Dimension 1	2	3	4
SRC_1	.371	.373	.300	.347
SRC_2	.375	.359	.359	.303
SRC_3	.360	.365	.352	.319