

# KWANTITATIEVE ANALYSE IN DE SOCIALE WETENSCHAPPEN

## MULTIDIMENSIONAL SCALING

Prof. Dr APM Coxon

### ASSESSMENT EXERCISE

*The course has concentrated on the analyses of three main types of data: 2W1M, 2W2M and 3W2M. The assessment exercise will require you to concentrate on the analysis of two of these types. The first option (A) involves using either data-sets analysed in the course (or ones of your own choosing). The second option (B) involves using data which has NOT been analysed in the course and choosing as many approaches, models and types of data as you wish. It will obviously be comparatively easier to do well in (B) and you will be given credit for choosing this option.*

*The purpose of the Exercises is to produce a succinct REPORT of a number of analyses using multidimensional scaling. The length of the Report should be between 3000 and 4000 words (excluding tables, figures etc), and should be submitted in word-processed format (either WORD or WORDPERFECT). Technical material and Figures/Tables not central to the argument should be included in a Technical Appendix, which does not count in the wordage, but should not exceed 5 pages. You should also include in the machine-readable version of your Assessment a copy of the RunScripts (and/or SPSS-Syntax files) including the data used.*

#### OPTION (A)

There are three sections in this assessment. You are required to do any two out of the three sections.

Find or obtain a set of data suitable for input into the appropriate data-type. Scale these data (by means of a suitable program from NewMDS(X), SPSS, PERMAP or any other relevant program of your choice) using both metric and non-metric transformations and the distance and/or vector models, and using any other options you think relevant. Assess the adequacy of the solutions, compare and interpret the configurations and results, using whatever additional information and programs you wish.

1. (2W1M) The basic model. Use both metric and non-metric transformations.
2. (2W2M) Rectangular data (row-conditional). Use both a Euclidean distance and another model (vector and/or correspondence analysis). Explain how and why the two resulting solutions are different, and what they indicate about the structure and interpretation of the original data.
3. (3W2M) 3-way 'stack' of 2W1M data. How far is the Group Space interpretable or representative? Are there systematic individual (or pseudo-subject) differences.

#### OPTION (B)

You should present one or two sets of data suitable for scaling analysis, and explain how the data were collected (and possibly pre-processed). Then choose appropriate forms of scaling analysis, and interpret your results. (If you choose one data-set it will be need to be substantial and be subjected to a wider range of analyses than if you choose two).

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