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# Computer Program Exchange

## SSRAT: Two-Dimensional Sociometric Status Determination Using Rating Scales

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### Description

SSRAT estimates two-dimensional sociometric status using rating scales to determine the five categories of sociometric status—Popular, Average, Rejected, Neglected, and Controversial. For example, in a classroom setting respondents are often asked to state the “liked least” and “liked most” peers. Then these five categories are derived by counting the number of “liked least” and “liked most” nominations using one of two current procedures (Coie, Dodge, & Coppotelli, 1982; Newcomb & Bukowski, 1983).

However, using SSRAT, data from 3-point, 5-point, 7-point, or 9-point rating scales can be used. Because greater reliability and variability of scores can be obtained using rating scales, a wider variety of analysis techniques can be used. With rating scales, respondents are not forced to nominate a prescribed number of their peers as least liked, but can express a positive or moderate view for all their peers (Maassen, Van der Linden, Akkermans, 1997).

For each person rated, SSRAT computes probability distributions of the total scores for Sympathy, Antipathy, Social Preference, and Social Impact. Expected scores for Sympathy and Antipathy are derived from their distributions, and are then compared to the scores actually received to obtain the derived sociometric status categories for each rated person based on a user-determined significance level.

SSRAT can also be used for a two-dimensional classification into five categories with reference to any peer perceived competence. Because the nomination procedure of Newcomb & Bukowski (1983) is also a probability method, it can be processed within the SSRAT framework by using the following coding scheme: 1 = antipathy nomination; 2 = no nomination; 3 = sympathy nomination.

By default, the data are arranged in a matrix **P**, with rows belonging to raters and columns to those rated. Multiple input data matrices can be processed in a single run. The output can also be arranged in the form of a SPSS data file for further statistical analysis. The technical background of the program is explained in Maassen, Akkermans, & Van der Linden (1996).

SSRAT is written in Turbo Pascal, using the TurboVision Library. SSRAT has an easy-to-use interface that includes a menu, windows, and dialog windows. A 32-page manual accompanies the program. The program can be used on any computer with MS-DOS installed and at least 640 KB of memory.

### Availability

The program and manual (Maassen & Landsheer, 1996) are available without charge. Send a DOS-formatted 1.44 MB 3.5-inch diskette with a self-addressed disk mailer to Gerard Maassen, Department of Methodology and Statistics, Faculty of Social Sciences, Utrecht University, P.O. Box 80140, 3508 TC Utrecht, Netherlands. Email: G.Maassen@fsw.ruu.nl.

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