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## SOCIOMET, A POWERFUL SOCIOMETRIC TOOL



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Relevance of peer relationships in the socio-cognitive development of children

# SOCIOMET

Authors: Julio González Álvarez and Francisco-Juan García Bacete (2010)

instruments are necessary to assess peer acceptance and

Reliable and user-friend

rejection

- **Characteristics** - A software for conducting sociometric studies that yields a description of the features of the peer relationships of each student and the characteristics of the classroom group.
- Its application can be extended to any context in which the participation of members of a group is required. - It provides
  - Useful knowledge about the social relationships from the perspective of the pupils. - Detailed sociometric characterization of each pupil and his/her sociometric type.
  - Understanding of the subgroups that exist in the classroom.
  - A measure of the social climate of the classroom.

#### Procedure of identification of sociometric type

(García Bacete, 2006; García Bacete & Cillessen, drafted manuscript) Adaptation of the Newcomb and Bukowski's (1983) binomial procedure to three, five or unlimited nominations

**PREFERRED**  $PNR \ge UL_{PNR}$  and  $NNR < M_{NNR}$ REJECTED NNR  $\geq$  UL<sub>NNR</sub> and PNR <  $M_{PNR}$ [PNR  $\geq$  UL<sub>PNR</sub> and NNR  $\geq$   $M_{NNR}$ ] or **CONTROVERSIAL**  $[NNR \ge UL_{NNR}$  and  $PNR \ge M_{PNR}]$  $PNR \le 1^*$  and  $NNR < M_{NNR}$ **NEGLECTED** 

**AVERAGE** The remaining participants \*In case of five or unlimited nominations the value should be the largest value of

LL<sub>PNR</sub> or 1 PNR = Positive nominations received NNR = Negative nominations received

UL = Upper Limit

LL = Lower Limit M = Mean

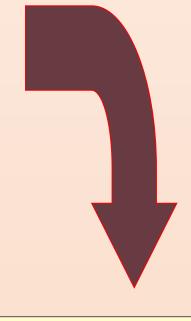
**PROCEDURE** 

#### 1.- APPLICATION OF THE QUESTIONNAIRE

1.- Who do you like most? 2 Who do you like least?

3.- Who do you think likes you? 4.- Who do you think does not like you?

Peer nominations can be limited to three, five or unlimited.





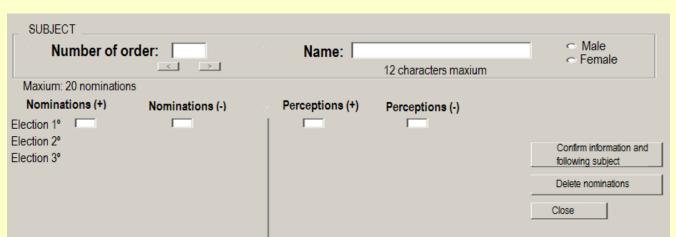


Figure 1. Display of data input

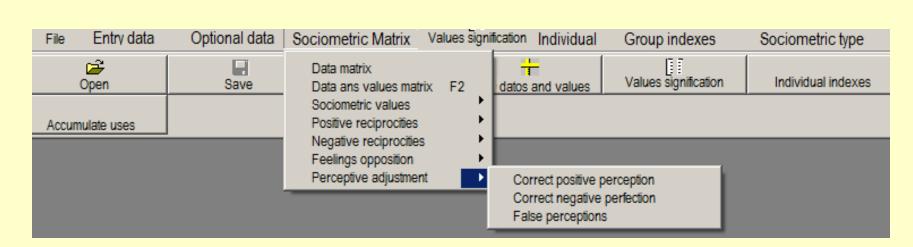


Figure 2. Taskbar of menus, buttons and submenus

The input is simple and rapid. The user can easily move from the data of a student to the immediately following student (figure 1). By means of an extremely simple taskbar, Sociomet indicates sociometric types, significance of the values, individual and group indices and displays graphics of social networks and sociometric matrix (figures 2 and 3).

It offers the possibility of exporting the output to other programs (e.g., Word, Excel, SPSS).

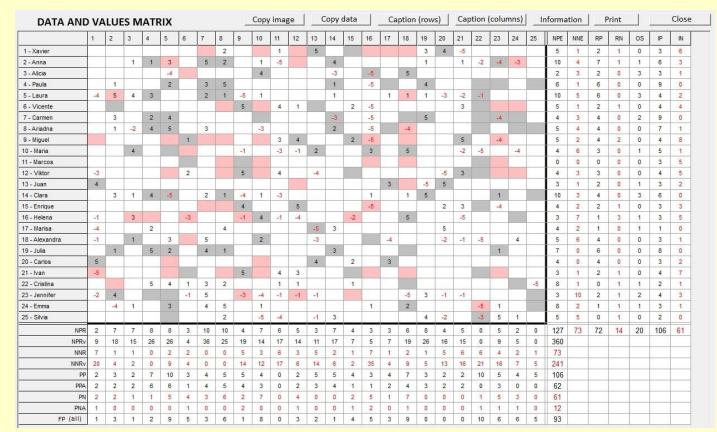


Figure 3. Value matrix

#### 3.- DATA ANALYSIS

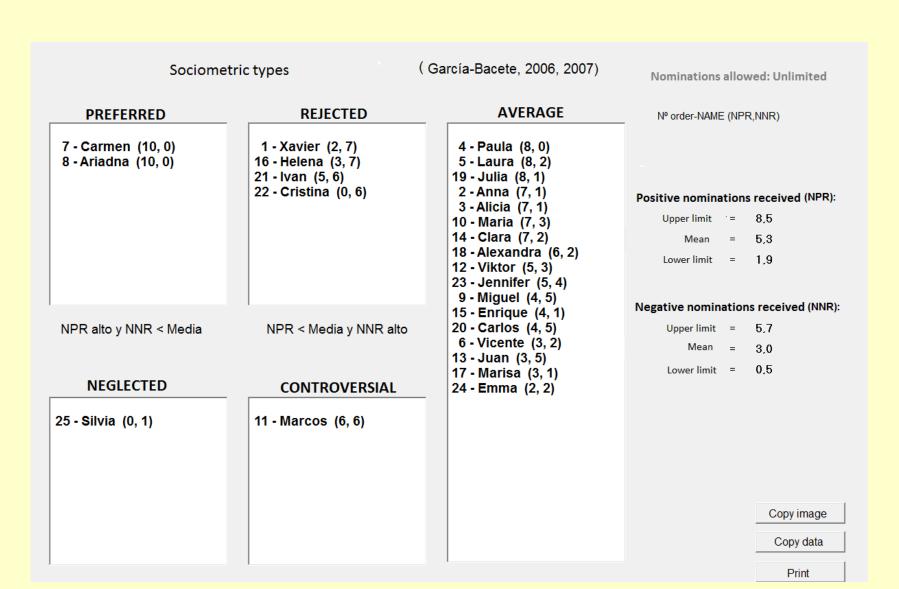


Figure 4: Sociometric types

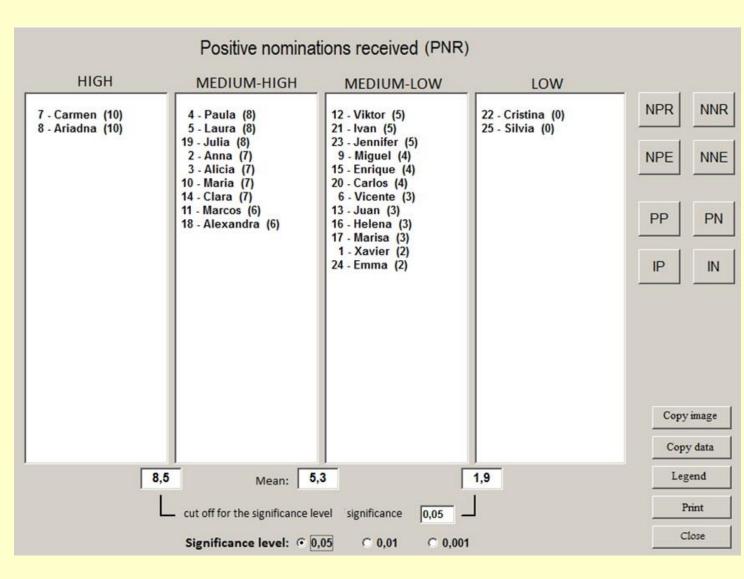


Figure 5: Positive nominations received

The figure 4 displays the sociometric type of each student (Preferred, Rejected, Average, Neglected and Controversial) and as an example of the situation of each pupil according the mean, upper limit and lower limit of nominations, figure 5 offers the distribution of PNR.

The <u>figure 6</u> shows an example of individual values and indexes. On <u>figure 7</u> is an example of sociogram of positive nominations. This and the other sociograms make the teacher aware of the sociometric characteristics of the pupils and the networks of friendships.

A user manual that explains all the possibilities provided by this powerful tool is available in Spanish (García Bacete & González, 2010).

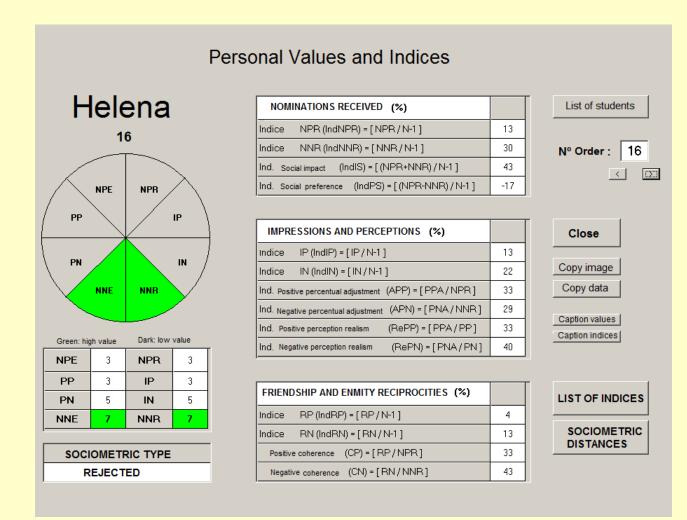


Figure 6: Individual values and indices

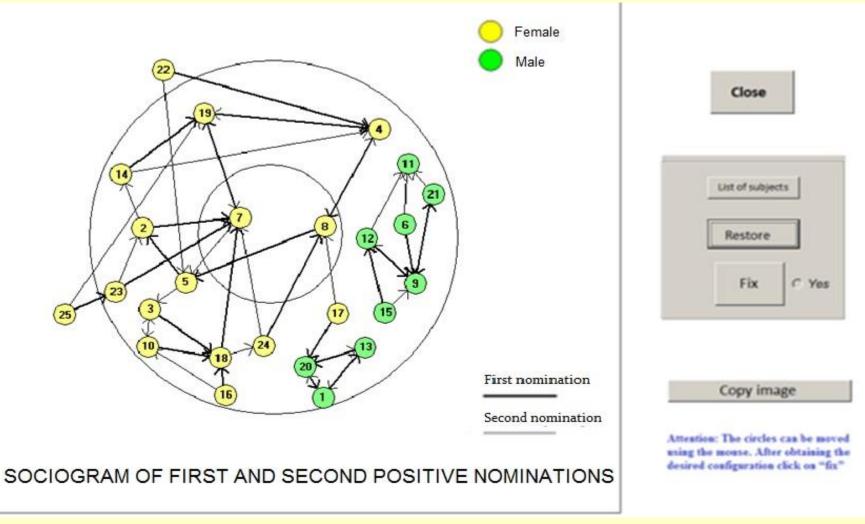


Figure 7: Sociogram of first and second positive nominations

### References

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Newcomb, A. F., & Bukowski, W. M. (1983). Social impact and social preference as determinants of children's peer group status. Developmental Psychology, 19, 856-867.