

A Matrix For The Representation of Environmental-Personality Relationships¹

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Previous satisfactory relationships from the use of a matrix in connection with sociometric data have been reported by Festinger (1), the writer (2), and others. The present matrix was adapted to categorize statements which the writer had collected from students concerning significant factors which had effected their personality formation. This report deals with a description of the matrix. The complete study will appear in a subsequent article.

Environmental-personality relationships were charted on a matrix composed of cells. Environmental factors were listed on the verticle axis in rows, and personality effects were listed on the horizontal axis in columns. Since each cell appeared at the junction of a row (environmental factor) and a column (personality effect) casual relationships were thus indicated.

Each cell was sub-divided into four squares. The top squares, right and left, indicated reports made by men. The bottom squares were for women's reports. The left-hand squares, top and bottom, indicated positive or favorable reports. The right-hand squares, top and bottom, indicated negative or unfavorable reports. The numbers appearing in each square represented per cents carried to four decimal points. For example, an entry of 160 in a square was read .0160. Thus, relative weight and percentage of frequency was determined upon inspection. The following example will illustrate:

The sums of the columns yielded a comparison between the relative frequency of personality effects and the sums of the rows yielded the same information concerning environmental influence.

¹ This is a resume of a paper presented at the Oklahoma State Psychological Association Convention, December, 1954.

Personality Category E:

Social Adaptability

Environmental Category 2: Parents	Men	Men
	Favorable	Unfavorable
	Women	Women
	Favorable	Unfavorable

In conclusion, the matrix proved useful in ordering the data according to environmental factors, personality effects, and casual relationships. The relative frequencies of responses thus ordered facilitated statistical analysis. The matrix proved useful as a visual aid in explaining the research project on levels of specificity and generalization.

BIBLIOGRAPHY

1. Festinger, Leon, Schacter, Stanley, and Back, Kurt, *Social Pressures in Informal Groups*, New York, Harper and Brothers, 1950.
2. Ostlund, Leonard A., "A Sociometric Matrix", *Proceedings of the Oklahoma Academy of Arts and Sciences*, 1953. Vol XXXIV.