



# SOCIOMETRY



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# INTRODUCTION



**Sociometry which is a quantitative method for measuring social relationships and is based on the fact that people make choices in interpersonal relationships.**



# MEANING



☐ The word sociometry came from the Latin “socius,” meaning social and the Latin “metrum,” meaning measure.



# DEFINITION



- [?] Oxford Dictionary defines sociometry as “the study of relationships within a group of people”.
- [?] Jacob Moreno (1887-1974) defined sociometry as "the inquiry into the evolution and organization of groups and the position of individuals within them”.



# NEED OF SOCIOMETRY



- [?] Focusing on achieving business or organization targets
- [?] Focusing on key contributors who create value -  
- the informal leaders
- [?] Knowing what is really going on -- enhancing the informal relationship networks
- [?] Focusing on culture – providing
- connection,

# SOCIOMETRY TEST :



- The basic technique in sociometry is the sociometric test .This is a test under which each member of a group is asked to choose from all other members those whom he prefers to associate in a specific situation .
- The situation must be real one to the group under study .
- Eg. Group study



# Requirements of sociometric test are:

- 1: The limits of the group should be indicated to the subjects.
- 2.The number of choice allowed should be specific & depend on the size of the group tested .
- 3. Each subject should be permitted to make his choices and rejections privately without the presence of other members in the group .
- 4.A specific criteria for choice should be used with reference to the
- functional activity of group .
- 5.Different levels of preference should be designed for each choice .
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# USES



- [?] It enables the teacher to get a comprehensive picture of structure of social relationship.
- [?] It is a special method of obtaining the information through oral question, written response and analyzing the record in studying the group
- [?] It is technique where by each





# Cont...



- member is asked to state the kind of relationship or to discover group structure and relation of any one person to the group as a whole.
- [?] It is useful in assigning committees for students.
- [?] It help to organize class projects.
- [?] This technique is simple
- to use and speedy in administration.



# Scoring sociometric choices



- \*One method is to count the number of times an individual is chosen disregarding the order of choice this is the most simple method .
- 2. Another method is to score the order of choice for: 3 points to first choice 2 to second and one point to third choice.
- 3. Third plan is to use a rating scale each subject may be asked to rate each one of the other members in a five point scale 4,3,2,1,0 for 4 means “ would like to work with him very much and 0 means “would not want to work with him at all.

# PROCESS OF SOCIOMETRY



- [?] A sociogram is an important tool for teachers. The sociogram is the chart used to actually apply sociometric in the classroom.
- [?] Its value to teacher is in its potentiality for developing greater understanding of group behaviour.
- [?] This shows the positive nature of sociometry and once the relationship is understood by the teacher, group work can be better facilitated for greater learning to occur.
- [?] The data for the sociogram may also be displayed as a table or matrix of each person's choices. Such a table is called a sociomatrix.

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# METHODS OF ANALYSIS OF SOCIOMETRIC DATA



- There are 3 important methods of sociometric analysis :
- 1.Sociometric matrix
- 2.Sociogram
- 3.Sociometric index



# SOCIOMETRIC MATRIX



- A matrix is a rectangular array (arrangement) of numbers or other symbols, sociometric is a square or in  $n \times n$  matrix.
- Eg: A group of 6 members respond to a sociometric question with whom would you like to work on such & such projects during the next 3 months? choose any 3 individuals. The responses made are choices of a member
- choose another, non-choice is denoted by 0.

**Eg: A group of 6 members respond to a sociometric questions with whom would you like to work on such & such projects during the next 3 months ? choose any 3 individuals .The responses made are choices of a member choose another denoted by 1 number, ,non - choise is denoted by 0.**

	A	B	C	D	E	F
A	0	1	0	1	0	1
B	0	0	0	0	1	1
C	0	0	0	1	1	1
D	0	1	0	0	1	1
E	1	0	0	1	0	1
F	0	1	0	1	1	0
TOTAL	02	03	0	04	04	05

# The table can be read by rows (left to right ) or in columns

- **ADVANTAGES OF SOCIOMETRIC MATRIX:**
- A. It is inclusive i.e relationship between every single pair is specifically recorded .
- B. Joint relationship among paris are recorded .
- C. Matrices may be combined and compared .

# SHORT COMINGS OF MATRIX:

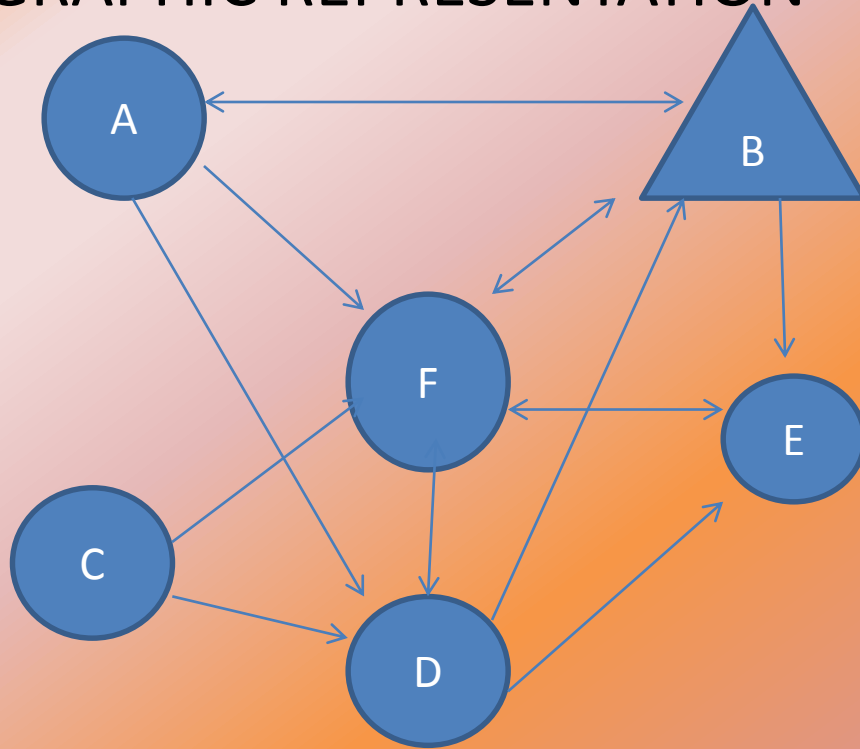
- It is not suitable for a large group
- It is a poor graphic device .
- It is a poor tool for detecting mutual choices and other aspects of group structure .

## **Sociogram**

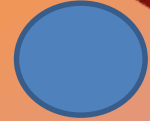
- A sociogram is a graphic representation of social links that a person has.
- It is a graph drawing that plots the structure of interpersonal relations in a group situation



# GRAPHIC REPRESENTATION



MALE



FEMALE



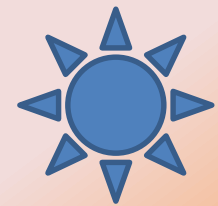
MUTUAL



ONEWAY



STAR



# Sociometric index:



- Sociometric choices or other relations are also measured by indices .A large member of medics are possible .
- [?] Choice states index :
- $$CSA = \frac{\sum CA}{n-1}$$
- (n-1)is used because one cannot choose oneself.
- Where CSA=Choice states of person A,
- $\sum CA$ = sum of choices in common A,
- n- 1member individual in the group .



# CONT..

- Group cohesiveness index:
- $$GC = \frac{\sum(MC)}{\frac{n(n-1)}{2}}$$
- Where GC=group cohesiveness
- $\sum MC$ =sum of mutual choices or pairs.



# Cont..

- n=the member of individual in the group.
- Group cohesiveness index: is the proportion of mutual choices to the member of possible pans.
- Social intensity index = 
$$\frac{\sum \text{acceptance} + \sum \text{rejections}}{(n-1)}$$
- Choise –rejection status :The member of choices minis the member of rejections

# BRANCHES OF SOCIOMETRY



- 1. research sociometry
- 2. applied sociometry.
  
- **LIMITATIONS**
- Not necessarily stable relationship.
- Some members of the group may not reveal their real relationships on account of some fear or other considerations .

# SUMMARY



# CONCLUSION





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