A comparative study on group cohesiveness between university level athletes and non-athletes groups

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Abstract
Sociometry method also serves as a powerful tool in lessening the communication gap and reducing conflict by helping the group to analyze, examine and evaluate its own dynamics. It can also be helpful in finding out the relevant group that requires therapy or training. The purpose of the present study was to compare the group cohesiveness between university level athletes and non-athletes groups. To determine the cohesiveness of a two small group. To find out if there is any difference in group cohesiveness of athletes and non-athletes groups. For the study total Twenty two (22) University level athletes students (11) and non-athletes students (11) were selected for the study based on the purposive sampling method. In this study causal comparative research design were used. The hypothesis selected for this study there was no significant deference in group cohesiveness of University level athletes and non-athletes groups. For this study socio-metric method (Moreno. J. 1934) was used to measure on group cohesiveness. For the analysis of the data socio-metric index was used. The socio-metric index of athletes group was 0.46 and non-athletes group was 0.36. The finding of this study proved that cohesiveness of athletes group has been found to be moderate cohesiveness and non-athletes group has been found to be low cohesiveness by using socio-metric method.

Keywords: Socio-metric star, Mutual, Cliques or Chain, Isolate, Sociogram, Socio-Metric Matrix, Group cohesiveness, Socio-metric Index, Socio-metric data sheet

Introduction
Sociometry can be used as a scale, with the help of which choices in forming interpersonal relationships of people can (maximum) a group consisting of 5-6 members are asked to select or choose members of the same group based on specific criteria as for example every-one in the group can make choices a discipline emerges of the networks inside the group, with the help of these choices or preferences a drawing, like a map, of those networks called a sociogram is developed the data for the sociometric matrix. A social group is a cluster of people who are related to each other on the basis of some common interest or attachment of group is a social aggregate in the members are interdependent and have at least potentials for mutual interaction.

In group dynamics the force mainly positive that causes members to remain in the group is called group cohesiveness. Cohesiveness is a character of a group as a whole. It deepens on the individuals towards the group. The degree of cohesiveness is usually reflected by its resistance to disruption by outside forces.

According to New Comb, a group is most cohesive when its members –
1. Find their members attractive.
2. Are motivated to take their role assigned.
3. More common understanding of the group norms.

High cohesive groups are found to be superior of conformity of morus, less tension and anxiety greater coping ability for life in general to less cohesive group.

The word sociometry (coined by Jacob Levy Moreno, 1953) comes from the Latin “socious”, meaning social and the Latin “metrium” meaning measures. The word therefore means that sociometry is a way of measuring the degree of relationship among people. Measuring the degree of relatedness or affiliation can not only help in evaluating the degree of cohesiveness amongst the members of the group, work team, class or organization, it may also help in bringing alert positive change and required interventions. Sociometry also serves as a powerful tool in lessening the communication gap and reducing conflict by helping the
group to analyze, examine and evaluate its own dynamics. It can also be helpful in finding out the relevant areas or group that requires therapy or training. It is measure which helps in evaluating how individuals associate with each other when acting as a group towards a specified goal (Giswell in Moreno, 1960 p-140). Moreno himself defined sociometry as the mathematical study of psychological properties of populations, the experimental technique and the results obtained by application of quantitative method (Moreno, 1953 p- 15-16).

In the present study, an attempt was made to determine nature of group of cohesiveness of post graduate level athlete’s students of University of Kalyani and non-athletes students of IGNOU Kolkata (W.B) applying sociometric method following some take performance.

Significance of the study
The aim of the present study is to focus on psychological characteristics of university level athletes and non-athletes students. If the university level students are found to have low group cohesiveness, a counseling programme for them can also be suggested and assessment of group cohesiveness. The finding also is helpful in finding out the relevant areas or group that requires therapy or training.

Objective of the study
Every research has some positive objectives and the researcher always tries to satisfy those objectives through systematic research work which leads towards the better completion. The main objectives of the present study is to observe the following-

1. To compare the group cohesiveness between university level athletes and non-athletes groups.
2. To determine the cohesiveness of a two small groups.
3. To find out if there is any difference in group cohesiveness athletes and non-athletes groups.

Hypothesis
There will be no significant difference in group cohesiveness of the university level athletes and non-athletes group.

Operational definition of the term used
Sociometric star: Regardless of the criterion, the person whose name is selected by maximum numbers of the group is known’s as the sociometric star of that specific criterion.
Mutuals: where two people chose each other.
Chains or cliques: where person A chooses person B was chooses person C who chooses D and so on.
Isolates: the person who has not been chosen by anyone within the groups.

Sociogram: with the help of the chooses or preferences a drawing, like a map, of those networks called a sociogram is developed.

Sociometric matrix: the data for the sociogram may also be displayed as a table or matrix of each person’s chooses, such a table is called a sociometrix.

Methodology
Population
In this present study, the population is all the University level male students’ age range between 22-30 years; from athletes group in University of Kanyani and non-athletes group in IGNOU Kolkata were considered as population of this study.

Sample
In this study purposive sampling method was used. 11 (male) from University of Kalyani (Department of Physical Education) and 11 (male) from IGNOU Kolkata (M.D.G.C) 1st year students was selected through purposive sampling method. Two comparative groups were formed in both Universities; each group would have equal number of subjects. Accordingly single comparative group consist of 11 subjects each (athletes male = 11) and (non-athletes male = 11).

Design of the study

In this study causal comparative research design was used.

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Students of 1st year | N =22
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Age: 22-30 years

University of Kalyani (Dept. of Physical Education)

Athletes group male
No =11

Group cohesiveness

IGNOU Kolkata (M.D.G.C)

Non-athletes group male
No = 11

Group cohesiveness

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"845"
**Statistical procedure**
The data was treated statistically using the formula given below –

\[ \frac{\sum (i \leftrightarrow j)}{D \times h \times s} \]

Where, \( d \) = number of preference. \( h \) = sample size \( s \) = number of situation
\( i \leftrightarrow j \) = total number of mutual choices.
The data was then transformed into a sociogram.

**Material required**
Questions regarding the aspects of togetherness and spontaneity of communication.

**Procedure and administration**
1. In preparing the questions a group of 60 students were taken.
2. At first each group member prepared three questions regarding the aspect of togetherness and spontaneity among group members.
3. Then all questions were gathered and accordingly tally marks were given to each question.
4. Thus all questions were accumulated and frequencies were selected for sociometric test. They are: -
   a. With whom would you like to go for picnic?
   b. With whom would you like to go for book fear?
   c. With whom would you like to go for travel?
5. Each individual group members in the sample of 11were then asked to rate the members (with preferences to the role assigned) according to their liking or preference in three rank (i.e. 1, 2 and 3) against each question.

**Analysis and interpretation of data**
The aim of the present study is to determine the cohesiveness of a two small group by the sociometric method. In this study 22 individuals formed two groups.

**Table 1: Preference, Sample size and Situation of the Athletes and Non-Athletes groups.**

<table>
<thead>
<tr>
<th>Group</th>
<th>No of Preference (d)</th>
<th>No of Sample size (h)</th>
<th>No of Situation (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletes</td>
<td>3</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Non-Athletes</td>
<td>3</td>
<td>11</td>
<td>3</td>
</tr>
</tbody>
</table>

From the table – 1 it appear that the number of preference (d), sample size (h), and number of situation (s) of the athletes and non-athletes groups were same 3, 11, and 3 respectively.

**Table 2: Total mutual choice, least cohesive subjects, No of click, Maximum cohesive subjects sociometrix index value, and Isolated subjects of the Athletes and Non-athletes groups.**

<table>
<thead>
<tr>
<th>Group</th>
<th>Total no of Mutual's choices</th>
<th>No of Least cohesive subjects</th>
<th>No of maximum cohesive subjects</th>
<th>No of click or chains</th>
<th>Sociometrix index values</th>
<th>No of isolated subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletes</td>
<td>21</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>0.46</td>
<td>0</td>
</tr>
<tr>
<td>Non-Athletes</td>
<td>18</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>0.36</td>
<td>1</td>
</tr>
</tbody>
</table>

From the table-2 that the athlete’s group total number of mutual choice is 21 and the non-athletes group total number of mutual choice is 18. So it may be told that athletes group has more cohesiveness than non-athletes group. From the table-2 that the both groups of the number of least cohesive subject and number of click are same. That is positive for group cohesiveness. From the table-2 that the athletes group number of maximum cohesive subjects was 2, and non-athletes group maximum cohesive subject was 1. So it may be told that athletes group has more group cohesiveness than non-athletes group. From the table-2 that the athlete’s group sociometrix index values found was 0.46. This indicates moderate level of cohesiveness. And the non-athletes group sociometrix index values was found 0.36. This indicates low level of cohesiveness. So it may be told that athletes group has more cohesiveness than non-athletes group. From the table-2 that the athletes group have 0 (zero) isolates subject, and non-athletes group have 1 (one) isolates subject. So it may be told that athletes group has more cohesiveness than athletes groups.

**Testing of hypothesis**
The null hypothesis stating that there will be no significant difference in group cohesiveness of the university level athletes and non-athletes group should be rejected, because the parameter of group cohesiveness is significantly difference (moderate and low).

**Conclusion**
The cohesiveness of the athletes group has been found to be moderate level and non-athletes group has been found to be low level by using sociometric method.

**Reference**


