A comparative study of aggression between physical education & general education students

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Abstract
Aim: The study could prove vital to understand the psyche of the society. It would give a clearer picture of the socialising effect of different streams of knowledge and how each of them contributes in increasing or decreasing aggression.

Methodology: Fifty subjects were selected for the study out of which 25 were from physical education and General education each.

Procedure: Buss-Durkee’s Aggression questionnaire was used to collect responses from the subjects to measure their aggression level.

Statistical Tool: Mean, Standard Deviation and ‘t’ test were used for the analysis of data.

Conclusion: The comparison of Physical and General education students revealed a significant difference in the aggression level among them as physical education students were found more aggressive than their counterparts.

Keywords: Physical education, general education, aggression

1. Introduction
A sound mind in a sound body has been an unchallenged maxim since the ages. But the recent research has also focussed and pointed out at the opposite fact, that is, can a sound body ensure a sound mind? Or how to ensure a calm, composed and sound mind in a physically fit body of a sportsperson? This led to the development of the field of sports psychology, which focussed on the mental makeup of a sportsman. It has long been acknowledged that psychological skills are critical for athletes at the elite level. Athletes with the requisite “mental toughness” are more likely to be successful. In the past, it was assumed that these skills were genetically based, or acquired early in life. Social learning theory rejects the notion of aggression as an instinct or frustration produced drive and proposes that aggression is no different from any other learned response. It can be learned through observation or imitation, and the more often it is reinforced the more likely it is to occur [1]. According to social psychologists, the most destructive force in our social relations is aggression [2]. Emotional arousal can occur via many situations like victory, failure, a wrong decision by umpire or by actions of others as evident from the crowd violence by throwing bottles or other objects in the field [3].

Many researchers focus on the brain to explain aggression. Numerous circuits within both neocortical and sub cortical structures play a central role in controlling aggressive behaviour, depending on the species, and the exact role of pathways may vary depending on the type of trigger or intention. In mammals, the hypothalamus and periaqueductal gray of the midbrain are critical areas, as shown in studies on cats, rats, and monkeys. These brain areas control the expression of both behavioural and autonomic components of aggression in these species, including vocalization. Electrical stimulation of the hypothalamus causes aggressive behaviour and the hypothalamus has receptors that help determine aggression levels based on their interactions with serotonin and vasopressin. Some theories stand in the approach of emphasising on the effects of physiological and biological factors on violence and aggressive behaviour. In this approach, factors such as hormones, alcohol, blood pressure, genetics, testosterone etc are argued to have influence on aggression [4].
2. Methodology
The researcher had decided to conduct the study of aggression between Physical Education and General Education students. A total of fifty (50) subjects were randomly selected for the collection of data. Twenty Five (25) Physical Education students and Twenty Five (25) General Education students were taken from Govt. College of Physical Education, Ganderbal and Govt. Degree College, Ganderbal, respectively. The Aggression level as a variable has been studied under four scales- Anger, Physical Aggression, Hostility and Verbal Aggression. For assessing level of aggression of Physical and General education students, a 29 items Aggression Questionnaire (AQ) was used. The AQ was invented by Buss-Durkee (1957) and was published in the journal of western Psychological services. The Questionnaire consists of items in four different scales namely; Anger, Physical Aggression, Hostility, and Verbal Aggression.

3. Statistical Analysis
To analyse the collected data, the scores were arranged according to the comparison and in sequential order so as to find out the statistical values. Mean, Standard Deviation (SD) and ‘t’ test were selected for comparing, analysing and Interpretation of numerical values and basing on which the findings were discussed.

### Table 1: Physical Education Students

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>23</td>
<td>3.51</td>
<td>8.645</td>
</tr>
<tr>
<td>Physical Aggression</td>
<td>17.84</td>
<td>4.74</td>
<td>0.634</td>
</tr>
<tr>
<td>Hostility</td>
<td>20.72</td>
<td>5.13</td>
<td>0.26</td>
</tr>
<tr>
<td>Verbal Aggression</td>
<td>13.64</td>
<td>3.13</td>
<td>0.17</td>
</tr>
</tbody>
</table>

### Table 2: General Education Students

<table>
<thead>
<tr>
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<th>Mean</th>
<th>S.D</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>16.84</td>
<td>6.14</td>
<td>8.645</td>
</tr>
<tr>
<td>Physical Aggression</td>
<td>16.84</td>
<td>5.59</td>
<td>0.634</td>
</tr>
<tr>
<td>Hostility</td>
<td>17.16</td>
<td>5.53</td>
<td>0.26</td>
</tr>
<tr>
<td>Verbal Aggression</td>
<td>12.12</td>
<td>3.52</td>
<td>0.17</td>
</tr>
</tbody>
</table>

The comparison of Statistical data in Table 1 and Table 2 regarding anger, physical aggression, hostility and verbal aggression between physical and General Education Students shows significant difference.

4. Discussion on Findings
The results of aggression level questionnaire of Physical and General Education students are presented in tables above and interpretation is given accordingly. Table 1 and Table 2 shows the comparison on the variables anger, physical aggression, hostility and verbal aggression between Physical and General Education students as:

The mean values were found to be 23 and 16.84, 17.84 & 16.84, 20.72 & 17.16 and 13.64 &12.12 respectively. The SD values were found to be 3.51 & 6.14, 4.74 & 5.59, 5.13 & 5.53 and 3.13 & 3.52 respectively. The ‘t’ value, being same for both was found as 8.645, 0.634, 0.26 and 0.17 respectively. The obtained values of physical education students were found to be significant with the degree of freedom of 48 while comparing with the values of general education students. Physical Education students have performed better regarding all the variables of aggression than their counterparts. The result revealed that Physical education students are more angry, physically aggressive, hostile and verbally aggressive in nature than General education students.

The results might be attributed to their practical environment, including different types of games.

5. Conclusion
From the above findings it is concluded that there is a significant difference with regard to aggression among Physical and General Education students. The students of physical education were found more aggressive in all the variables of aggression. The results can be related to their maximum participation in sports as aggression is one of the key factors required in certain sports.

6. Reference