Perception of higher secondary students towards physical education: a study in some selected government higher secondary schools of Nagaon district of Assam

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Abstract

The prime focus of the present study was to examine the perception of higher secondary students towards physical education. In recent years, physical education has not provided so well throughout the nation despite recognizing its needs. The schools like the regular scholastic activities have not given equal importance to the non-scholastic one. For conducting the study, the investigator has selected Government higher secondary schools of Nagaon district of Assam, both from rural as well as urban areas. A total of 216 students were selected by using stratified random sampling technique. The data were collected by using a self-structured questionnaire. The data were analyzed by using various statistical techniques like simple frequency percentage, Mean, SD, chi-square etc. Graphical representation of data was also made. The results of the study will be helpful for the teachers, educators, and policy makers etc to take up favourable steps in the field of physical education.

Key words: Perception, Physical education, Higher secondary students.

1. Introduction

Physical education refers to instruction in the development and care of the body ranging from simple calisthenics exercises to a course of study providing training in hygiene, gymnastics, and the performance and management of athletic games. To define physical education, we need to say that it is an educational process that aims to improve human development and performance through physical activity. It tends to take place at school through formal lessons, but it also includes informal activity such as play.

Physical education is a process of learning, the context being mainly physical. The purpose of this process is to develop specific knowledge, skills, and understanding and to promote physical competence. Different sporting activities can and do contribute to this learning process, and the learning process enables participation in sports. The focus, however, is on the child and his or her development of physical competence rather than the activity. Physical education has a holistic view within a societal context that identifies the interdependence of personal health with societal health and environmental health.

2. Significance of the study

There are serious national implications for failing to fully understand why the progress of physical education is not up to the mark. There has been a preponderance of literature in recent years that would indicate physical education programs are not doing so well throughout the nation.

Knowledge of students’ perception plays an important role in the education planning process. Without a basic understanding of the factors affecting the perception as well as difference regarding gender
and locality, the future prospect of this subject will remain vague. Therefore, the investigator conducted the present study with a view to know students’ perception about physical education, with special reference to higher secondary students, as this stage is the peak stage of all round development of students.

3. **Statement of the research problem**
   
   Keeping in mind the needs and significance, the investigator chose the following topic as the subject of the study, 
   
   PERCEPTION OF HIGHER SECONDARY STUDENTS TOWARDS PHYSICAL EDUCATION: A STUDY IN SOME SELECTED GOVERNMRNT HIGHER SECONDARY SCHOOLS OF NAGAON DISTRICT OF ASSAM’

4. **Objectives of the study**
   
   Keeping the needs and significance of the study, the investigator formulated the following objectives.
   
   1. To study the level of perception of +2 level students towards physical education.
   2. To study the significant different in the levels of perception of students towards physical education regarding gender.
   3. To study the significant difference in the perception of students towards physical education regarding locality.

5. **Hypotheses of the study**
   
   As objective number 1 is fact finding in nature, so null hypotheses were formulated for objective 1 and objective 2 and not for objective 1.
   
   $H_0 1$: There exists no significant difference in the perception of students towards physical education regarding gender.
   
   $H_0 2$: There exists no significant difference in the perception of students towards physical education regarding locality.

6. **Variable of the study**
   
   In any study, there are two variable namely Independent variables and Dependent variables are used. In the present study, ‘Perception’ is independent variable and ‘Physical education’ and ‘higher secondary students’ are dependent variables.
   
   The following figure 1 will depict these two types of variables of the study.

![Fig. 1: +2 level students](image)

7. **Delimitations of the study**
   
   The study was delimited to the following things.
   
   1. It was conducted within the area of Nagaon district of Assam.
   2. The population and sample covered higher secondary students.
   3. It covered a few selected Government higher secondary schools only.
   4. It considered both male and female students of rural and urban areas.
   5. It studied the perception of students towards physical education and nothing else.
8. **Review of related literature**

Review of related literature is an indispensible part of every research. It is so because, reviews provide the researcher an insight into the methodologies, sample, population, tools, methods of data analysis etc previously used by the investigators in the related study.

The present study is all about knowing students’ perception towards physical education. Many international, national and regional studies have been reviewed by the investigator for this purpose. The study of G, Linda. R (2007) studied the relationship between students’ personal factors like gender, race, career awareness etc and the perceptions of secondary school students regarding physical education. The study of Papaioannou, A. (2002) also resembled many of the variables of the present study. Another study of Mohsen. Ghofrani. et.al. (2014) showed that students’ perceptions of physical education did not significantly vary by school, but there was a high level of uncertainty about all aspects of physical education recorded at all schools. Carlson (1994) reported that factors influencing the development of student attitudes have been the cultural (gender, sexual and psychological differentiation pattern of athletes), social (family, media, sports and physical education business, skill level and perception of fitness level of himself and peers and school (Teachers) (Carlson, 1994). Other researchers, such as Luke and Sinclair (1991) understood that teachers have the greatest impact from the various factors influencing positive or negative attitude toward physical education lessons (Luke & Sinclair, 1991).

9. **Methodology of the study**

Methodology of the study can be discussed under the following heads.

9.1 **Research design**

Research design denotes a blueprint of the research process through which the researcher wants to make others understood how he/she collects the data, use methods of treating data, analyze and interpret them etc.

Descriptive survey method has remained one of the most widely used methods in social science research. It fits with the nature of the present study for which the investigator adopts it.

9.2 **Population of the present study**

Population in research study denotes the universe. In order to carry out a study, the investigator first has to identify the population and its nature.

In the present study, population comprises of all the higher secondary students studying in some selected Government schools of Nagaon district of Assam. The investigator considers those students who were enrolled for the session 2016-17.

Below in the figure 1, the population of students for the present study is shown.

![Fig. 2 : Distribution of population](image)
9.3 Sample
Sample denotes the miniature part representing the large whole. It is not feasible for any investigator to study the whole population, for which he has to select a certain portion as sample for the study.

9.4 Method of sampling
Sampling methods mean the some total of the techniques and methods which the investigator uses for selecting the sample. For doing it, the investigator used stratified random sampling method.

9.5 Sample size
After making field survey, the investigator has found that the total population of the 10 Govt. higher secondary schools (5 urban and 5 rural) are 1080. Among them, 580 are female students and 500 are male students. The investigator has taken 20% students as sample and that 20% has been divided as 50% male and 50% female students. So, out of the total students, 216 are taken. Again, out of 1080 students, 790 are rural and 290 are urban students. Among 790 rural students, 350 are male and 440 are female students. Likewise, among 290 urban students, 150 are male and 140 are female students. Therefore, by taking 20% from the rural category the sample becomes 158 (79 male and 79 female) and 20% from female category, the sample turns into 58 (29 male and 29 female).

In the figure 3, the sample structure of the study is shown.

![Sample structure of students](image)

9.6 Tools of data collection
For collecting data, every researcher uses some tools. Depending on the nature and objectives of the present study, the investigator used a ‘self-structured questionnaire’.

9.7 Methods of developing the tool
The questionnaire that has been used for the present study comprises of a set of 30 questions. All the questions are closed type, which can be answered either ‘Yes’ or ‘No’. The items included are related to various aspects of students’ perception towards physical education.

9.8 Procedures of scoring the tool
For the questionnaire, a manual scoring key was developed by the investigator. For the convenience of calculation, the raw scores were converted into Z-scores. The levels of perception were divided into three categories namely ‘High’, ‘Moderate’ and ‘Low’. The maximum score obtained was 25 and minimum was 5. In the table 3.1, the assignment of the perception levels is being showed.
9.9 Validity and reliability of the tool

Before finalizing the tool, it was tried out on a sample of 50 students of same nature with 56 items. After the pilot test, the results were calculated and it was shown to some of the experts of the fields of research and by making consultation with them, the items having irrelevance to the study, items having same nature and items got no response were deleted from the tool. In this way, the validity of the contents of the tool was verified.

On the other hand, split-half reliability was applied for determining the reliability of the tool, which was found to be 0.81 by using Product Moment method.

9.10 Data collection procedures

This study mainly makes uses of two types of data-‘Primary data’ and ‘Secondary data’. For collecting primary data, the investigator visited the sample schools and after letting the students know about the procedures of filling up the questionnaire, collected the filled up sheets. They were assured the fact that it was done for research purpose only and their responses would be remained undisclosed.

For collecting secondary data, the investigator made use of various sources like thesis, dissertations, survey reports, research article, newspapers etc.

9.11 Statistical treatment of data

For analyzing and interpreting data, the investigator used the following statistical methods,
1. Simple frequency percentage
2. Arithmetic Mean
3. Standard Deviation
4. Chi-square
Bar diagram and pie diagram have been used for representing data in graphical form.

10. Results and discussion

The objective of this study is to know the perception of higher secondary students towards physical education. Thus, the data collected were analyzed and interpreted by using various statistical techniques as per the objectives.

Objective 1: To study the level of perception of +2 level students towards physical education

To fulfill this objective, the investigator calculated simple frequency percentage (%). In order to know the levels of perception of students towards vocational education, the number and percentage of students in each level of perception were calculated, that is shown in table 4.1 and figure 4.

Table 3.1 : Levels of perception and range of Z-scores

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Z-score range</th>
<th>Perception level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>+2.02 to above</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>+1.25 to +2.00</td>
<td>Moderate</td>
</tr>
<tr>
<td>3</td>
<td>-1.25 to +1.24</td>
<td>Low</td>
</tr>
</tbody>
</table>

Table 4.1 : Number and percentage of students in three perception levels

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Level</th>
<th>No of students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High</td>
<td>53</td>
<td>24.53%</td>
</tr>
<tr>
<td>2</td>
<td>Moderate</td>
<td>130</td>
<td>60.20%</td>
</tr>
<tr>
<td>3</td>
<td>Low</td>
<td>33</td>
<td>15.27%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>216</td>
<td>100.00%</td>
</tr>
</tbody>
</table>
So, according to table 4.1 and figure 4, 53 (24.53%) of students showed high, 130 (60.20%) moderate and 33 (15.27%) showed low level of perception towards physical education. From this point of view, we can conclude that maximum number of students had moderate level of perception.

**Table 4.2 :** Number and percentage of students’ perception (Gender wise)

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Level</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>1</td>
<td>High</td>
<td>32</td>
<td>29.06</td>
</tr>
<tr>
<td>2</td>
<td>Moderate</td>
<td>60</td>
<td>55.06</td>
</tr>
<tr>
<td>3</td>
<td>Low</td>
<td>16</td>
<td>14.08</td>
</tr>
<tr>
<td></td>
<td></td>
<td>108</td>
<td>100.00</td>
</tr>
</tbody>
</table>
So, according to table 4.2 and figure 5, 32(29.06%) male students showed high, 60 (55.06%) moderate and 16 (14.08%) showed low level of perception. Similarly, 40(37.00%) female students showed high, 50 (55.06%) moderate and 13 (14.08%) showed low level of perception. So, both male and female students had moderate level of perception towards physical education.

Table-4.3 : Number and percentage of students’ perception (Locality wise)

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Level</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>1</td>
<td>High</td>
<td>40</td>
<td>25.43</td>
</tr>
<tr>
<td>2</td>
<td>Moderate</td>
<td>96</td>
<td>60.57</td>
</tr>
<tr>
<td>3</td>
<td>Low</td>
<td>22</td>
<td>14.00</td>
</tr>
</tbody>
</table>

158 100.00 58 100.00

So, from table 4.3 and figure 6 we have observed that 40(25.43%) rural students showed high, 96 (60.57%) moderate and 22 (14.00%) showed low level of perception. Similarly, 17(37.00%) urban students showed high, 30 (50.00%) moderate and 11(13.00%) showed low level of perception. So, both rural and urban students had moderate level of perception towards physical education.

Objective 2: To study the significant different in the levels of perception of students towards physical education regarding gender

H₀₁: There exists no significant difference in the perception of students towards physical education regarding gender.

To fulfill this objective and test the null hypothesis 1, the investigator used simple frequency percentage and chi-square test.

Table- 4.4 : Mean and SD of levels of perception of male and female students

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Level</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>1</td>
<td>High</td>
<td>25.00</td>
<td>.79</td>
</tr>
<tr>
<td>2</td>
<td>Moderate</td>
<td>19.24</td>
<td>.50</td>
</tr>
<tr>
<td>3</td>
<td>Low</td>
<td>11.26</td>
<td>1.76</td>
</tr>
</tbody>
</table>
So table 4.4 and figure 7 showed us the Mean score and SD in the three levels of perception of male and female students.

**Table- 4.5 :** Chi-square value of male-female students’ perception towards vocational education

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson chi-square value</th>
<th>df</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender difference in perception level towards vocational education</td>
<td>27.37**</td>
<td>6</td>
<td>Significant at 0.01 and 0.05 levels</td>
</tr>
</tbody>
</table>

Calculated chi-square value=27.37 (df 5)
Table value of chi-square=16.812 (**0.01 level of significance) <27.37
Table value of chi-square=12.592 (**0.05 level of significance) <27.37

So, table 4.5 showed that the calculated chi-square value for difference between male and female students’ perception at 6 difference level found to be 27.37 which is significant both at 0.01 and 0.05 level of significance as the table values for both the levels are lower than the calculated value. Hence, we can reject the null hypothesis, ‘There exists no significant difference in the perception of students towards physical education regarding gender’.

**Objective 3:** To study the significant difference in the perception of students towards physical education regarding locality.

H$_{s2}$: There exists no significant difference in the perception of students towards physical education regarding locality.

To fulfill this objective and prove the null hypothesis, Mean and SD for all the perception levels as well as chi-square have been calculated.

**Table 4.6 :** Mean and SD of levels of perception of male and female students

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Level</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>1</td>
<td>24.61</td>
<td>.87</td>
<td>23.60</td>
</tr>
<tr>
<td>2</td>
<td>18.26</td>
<td>.48</td>
<td>16.29</td>
</tr>
<tr>
<td>3</td>
<td>10.27</td>
<td>1.26</td>
<td>0.56</td>
</tr>
</tbody>
</table>
So, table 4.6 and figure 8 showed us the differences in Mean score and SD between rural and urban students’ levels of perception.

Table 4.7: Chi-square value of rural-urban students’ perception towards vocational education

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson chi-square value</th>
<th>df</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locality difference in perception level towards vocational education</td>
<td>2.99</td>
<td>6</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

Calculated chi-square value = 2.92 (df 5)

Table value of chi-square = 12.592 (0.05 level of significance) > 2.92

So, table 4.7 showed that the calculated chi-square value for difference between rural and urban students’ perception at 6 difference level found to be 2.92 which is not significant both at 0.01 and 0.05 level of significance as the table values for both the levels are higher than the calculated value. Hence, we can accept the null hypothesis, ‘There exists no significant difference in the perception of students towards physical education regarding gender’.

Following are the major findings of the study.

1. More number of students (130, i.e., 60.20%) showed moderate level of perception towards physical education.
2. 32 (29.06%) male students showed high, 60 (55.06%) moderate and 16 (14.08%) showed low level of perception. Similarly, 40 (37.00%) female students showed high, 50 (55.06%) moderate and 13 (14.08%) showed low level of perception. So, both male and female students had moderate level of perception towards physical education.
3. 40 (25.43%) rural students showed high, 96 (60.57%) moderate and 22 (14.00%) showed low level of perception. Similarly, 17 (37.00%) urban students showed high, 30 (50.00%) moderate and 11 (13.00%) showed low level of perception. So, both rural and urban students had moderate level of perception towards physical education.
4. The calculated chi-square value for difference between male and female students’ perception at 6 difference level found to be 27.37 which is significant both at 0.01 and 0.05 level of significance as the table values for both the levels are lower than the calculated value. Hence, we can reject the null hypothesis, ‘There exists no significant difference in the perception of students towards physical education regarding gender’.
5. The calculated chi-square value for difference between rural and urban students’ perception at 6 difference level found to be 2.92 which is not significant both at 0.01 and 0.05 level of significance as the table values for both the levels
are higher than the calculated value. Hence, we can accept the null hypothesis, ‘There exists no significant difference in the perception of students towards physical education regarding gender’.

11. Conclusion

Physical education is the need of the present hour, as today’s society is oriented itself in students’ all round development. Every student after completion of his/her academic life should get directions regarding the way he or she will go in order to become economically self-dependent. Physical education is the subject that selects students’ capabilities to adopt a particular sport or game, various opportunities one can get after taking up a particular sport or game as the career. It will be a great help for students to make physical development better, thereby making developments in other areas of personality.

The present study showed that higher secondary students had moderate or average level of perception regarding physical education. In order to create high level of perception, it’s the high time to make this subject more popular by making it available in all the institutions irrespective of stream, locality etc. Regular appointment of physical education teachers as well as more new courses and subjects will motivate students to take up this subject and get directions for future life.

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