ACADEMIC ACHIEVEMENT IN RELATION TO GENDER, LOCALITY AND CASTE OF THE STUDENTS STUDYING UNDER WEST BENGAL BOARD OF SECONDARY EDUCATION

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Abstract

Academic Achievement is one of the most important goals of the students in their academic life. This study is an attempt to show Academic Achievement based on Gender, Locality, and Caste of the students studying under the West Bengal Board of Secondary Education. The sample consists of 614 students (appeared in Secondary Final Exam, 2019) from a few districts of WB. The Ex post facto method was used for the present study for data collection. The researcher used a cluster sampling method to identify the candidates and their results were used as data of this study. ‘t’ test was used to measure the significance of the difference between the mean scores of the student’s sex-, locality- and caste-wise. The study revealed that there is a significant difference of mean achievements between the rural & urban students; boys and girls; and general caste & backward caste students. The results of the study were verified by the triangulation method using the opinions (of the responsible persons living in the vicinity of schools where from the results were collected) on the educational scopes enjoyed by different sections of the students in WB schools.

Introduction:

In India, there is enormous social diversity. This diversity is most often reflected in the educational system more particularly in school education. This diversity differs from region to region or states to states. Among these diversities, the most common are (1) Casteism (2) Gender & (3) Locality. Among these diverse groups, there is a presence of the weaker sections who are deprived of the opportunity of the educational facilities. The Central Govt. introduced different articles, rules, principles (article15 read with articles 29 &46) in the Indian constitution to alleviate the problems of social injustice as regards education. This weaker section, among others, means girls& women, and backward castes (comprising of Schedule caste, Schedule tribe & OBC)

These backwardness and weakness developed among different groups of people have a long history. Only boys could study in ancient India. Some girls from royal families got the opportunity to study. After the independence of India, though many facilities have been given to women, yet, there are problems of girls related to physical, social, and psychological dimensions. Many families provide opportunities for boys to get an education but girls do not get similar facilities because, to them, boys are considered as the future leader of families. Education is a recognized powerful tool for upward movement and can remove these socio-economic disparities, taboos, and imbalances.
In the Indian constitution, there are many legal provisions to provide financial help, legal help, scholarship, admission & hostel facilities to the backward classes. Various departments of our government have decided to reduce inequality as regards casteism. The RTE Act 2009 is implemented to ensure equity and equality of all castes in the education sector including other weaker sections. The people of rural areas, though subjected to the same constitutional & educational provisions, have been deprived of educational opportunities. The cities are equipped with economic, communication, and other infrastructural facilities which the rural people could not even imagine earlier. Mass media, easy communication systems, transport systems, electricity, and well-functioning three-tier Panchayat system have been introduced in rural areas after independence for the improvement of rural areas. Moreover, the teachers coming out of the same TET are appointed in all sorts of schools under the administrative and financial control of Govt.

The central Govt. along with states and union territories, perhaps, left no stone unturned for ensuring equity among the weaker sections of society for ensuring social justice and equality in educational opportunity. After seven decades of independence of India, it will not be unusual to arrange a stock-taking of these facilities’ vis-a-vis the academic achievement of students of weaker sections in comparison to their so-called more able counterparts.

**Review of related literature**

Chattopadhyay (1998) found that the backward caste students significantly lag behind the other students in most of the academic tests. Raju (2013) revealed a significant difference between boys and girls & rural and urban students concerning their Academic Achievements. Chahal & Yadav (2016) found that the academic achievements of rural and urban high school students differ significantly but no such significant difference exists between general and backward caste students. Dhar & Biswas (2016) found that male students had more improvement in Achievement in Chemistry of H.S. in comparison to their female counterparts. Hooda & Devi (2017) found that locality and gender have a significant impact on the Mathematics Achievement of secondary school students. Sinha & Anwar (2016) revealed that there is a significant difference between the Academic Achievement of urban and Rural class IX students. A very few researches available in Indian context do not focus on achievement in relation to gender, castes, locality among secondary school students. Thus the present study is endeavor to investigate the Academic Achievement in relation to gender, locality and caste of the students studying under West Bengal Board of Secondary Education.

**Objectives of the Study**

The objectives of the study are as follows:

1. To find out the significance of the difference between the mean scores obtained by boys and girls in their secondary final examination under the West Bengal Board of Secondary Education.
2. To find out the significance of the difference between the mean scores obtained by rural & urban students in their secondary final examination under the West Bengal Board of Secondary Education.
3. To find out the significance of the difference between mean scores obtained by general caste & backward caste students in their secondary final examination under the West Bengal Board of Secondary Education.
4. To get an insight into the educational facilities enjoyed by different strata of school students in their home and the school environment.

**Hypotheses of the study**

From the above objectives, the following null hypotheses were formulated (for testing them statistically).

- \( H_{01} \): There is no significant difference between the mean scores obtained by boys’ and girls’ students in their secondary final examination under the West Bengal Board of Secondary Education.
- \( H_{02} \): There is no significant difference between the mean scores obtained by rural & urban students in their secondary final examination under the West Bengal Board of Secondary Education.
- \( H_{03} \): There is no significant difference between the mean scores obtained by general caste & backward caste students in their secondary final examination under the West Bengal Board of Secondary education.

**Research Question (for qualitative part)**

Do the school students of different categories enjoy similar educational facilities in the home and school environment?
Significance of the study
1. Madhyamik Pariksha or M.P. (Secondary Examination) results are very important for higher education. So, there is a need to find out the impact of caste, gender, & locality of the students on their achievement in M.P.
2. This research will help us to find out the impact of students’ gender on Academic Achievement.
3. We can learn from this research, if there is any impact of locality on the Academic Achievement of the learners.
4. From this research we can find out if there is any impact of the caste of the learners on their Academic Achievement.
5. This research will help us to take necessary steps according to the impact of gender, locality, and caste on the Academic Achievement of the learners.
6. It may help to reveal whether the educational facilities extended to the different categories of pupils are commensurate with their academic achievements.

Operational definition of the terms used
Academic Achievement: An Academic Achievement refers to the “level of performance in school, accomplishment or success in school” or something which someone has succeeded in doing especially after a lot of effort.

In the present study, the achievement is defined on the basis of the learner’s score obtained in the Madhyamik Examination of WBBSE.

Urban area: “urban area” means, an area which is under a Municipality, Corporation, or notified area where at least 75% of the population is working in the tertiary and quaternary service sector where the density of population is above 400/ sq.km and has a minimum population of 5000.

Rural Area: “Rural Area” means a geographic area that is located outside towns and cities. Agricultural lands are commonly rural types of areas. Minimum 75% of people are dependent on agriculture such as fishing, forest, etc. It is an area with a population density of less than 400/ sq.km and it is located under panchayat and has less than 5000 population.

General caste: 'General caste’ one type of social group which is not qualified for reservation benefits and other affirmative action schemes operated by the Indian government.

Backward caste: ‘Backward class’ means socially and educationally backward classes, here SC and ST students only.

Gender: Here Gender means only Male (Boys) and Female (Girls) students only.

Variables in the present study
Major (dependent) variable: Academic Achievement (here results of Secondary Examination or Madhyamik Pariksha or M.P.)

Categorical (independent) Variables: Gender (Boys & Girls), Castes (General & Backward), Localities (Rural & Urban)

Methodology of the Study:--
According to the nature and objectives of the present study, ‘DESCRIPTIVE SURVEY METHOD (ex post facto)” was used in the study.

Sources of Data:
Primary Sources:
School Registers were used as a source of the achievement scores of the students in Secondary Examination. Here scores obtained by the students in the Secondary Examination, 2019 under West Bengal Board of Secondary Education were considered as their academic achievement scores. The total mark of the examination is 700.
Secondary Source:
Questionnaire. A non-standardized questionnaire was developed by the researcher on the educational facilities enjoyed by the students of different categories. With the help of this questionnaire opinions on the facilities were collected from the responsible persons living in the vicinity of the schools.

Sampling Procedure:
(1) The Investigator collected the data from 13 (thirteen) Bengali Medium Schools affiliated under WBBSE. To select schools the researcher used a **cluster sampling technique**.

The researcher selected 13 (thirteen) schools from four districts of West Bengal e.g. Burdwan–East, Bankura, Birbhum and Hooghly. The schools were initially selected gender-wise and locality-wise. On the analysis of biodata collected from the schools, the General and Backward caste students were identified. There were 5 rural schools & 8 urban schools. The rural schools were all co-educational and have a large number of students each.

1. Burdwan (East): 1 Coeducational school + 1 Urban boys’ + 1 Urban Girls’
2. Bankura-1 Coeducational school + 1 Urban Boys’ + 1 Urban Girls’
3. Birbhum-1 Coeducational school + 1 Urban Boys’ + 1 Urban Girls’
4. Hooghly-1 Rural Boys’+1 Rural Girls+ 1 Urban Boys’ + 1 Urban Girls’

On the whole, Secondary Examination scores of 614 students were collected from 13 schools of WBBSE, ignoring pass, fail, division or any such comments in result sheets.

**Sampling Frame**
For the Students

![Sampling framework for the students.](image)

**Table 1:** Strata-wise distribution of students.

<table>
<thead>
<tr>
<th>Strata</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gen</td>
<td>Back</td>
<td>Total</td>
</tr>
<tr>
<td>Boys</td>
<td>168</td>
<td>30</td>
<td>198</td>
</tr>
<tr>
<td>Girls</td>
<td>192</td>
<td>31</td>
<td>223</td>
</tr>
<tr>
<td>Total</td>
<td>360</td>
<td>61</td>
<td>421</td>
</tr>
</tbody>
</table>

**Procedure of data collection**

**Scores of students in Secondary Examination 2019:**
The investigator collected Madhyamik Pariksha scores from the concerned schools’ records in respect of 614 Boys and Girls candidates belonging to both Urban and Rural areas. Out of 614 students 347 were girls, and the rest 267 were Boys and Girls each were divided into two parts urban and rural. Here urban students were 421 and rural students were 193. The candidates were further divided into General caste and Backward caste based on available
records. In urban area 421 students/candidates were divided in two parts: general castes students 360 and backward caste students 61. Similarly, rural students were divided into two parts: General caste students 143 and backward caste students 50. The scores were collected and arranged category-wise.

**Educational Facilities enjoyed by the students in home and school:**
The questionnaire contains 12 items on which opinions of the guardians/parents/teachers/responsible persons in the locality of the schools were collected. The respondents gave their opinions for different categories of students with weighted scores (out of 10). The categories are Boys-Girls, Rural-Urban, Gen Caste-Backward castes. Information was collected from 26 respondents two each from the locality of each school.

**Presentation of data**

**Table 2:** Descriptive Statistics of the collected Data.

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M (Mean -scores)</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>347</td>
<td>451.90</td>
<td>165.67</td>
</tr>
<tr>
<td>Girls</td>
<td>267</td>
<td>383.75</td>
<td>153.43</td>
</tr>
<tr>
<td>Urban students</td>
<td>421</td>
<td>487.64</td>
<td>121.83</td>
</tr>
<tr>
<td>Rural students</td>
<td>193</td>
<td>251.40</td>
<td>114.75</td>
</tr>
<tr>
<td>General caste</td>
<td>503</td>
<td>429.03</td>
<td>157.83</td>
</tr>
<tr>
<td>Backward caste</td>
<td>111</td>
<td>343.64</td>
<td>164.66</td>
</tr>
</tbody>
</table>

**Table 3:** Facilities as enjoyed by different categories of school students in terms of Weighted Scores given by responsible persons of the school localities.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Boys</th>
<th>Girls</th>
<th>Urban</th>
<th>Rural</th>
<th>Gen Caste</th>
<th>Backward Caste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities in %</td>
<td>18.0</td>
<td>15.0</td>
<td>19.0</td>
<td>14.0</td>
<td>25.0</td>
<td>9.0</td>
</tr>
</tbody>
</table>

**Hypotheses testing**

**Table 4:** t-tests for finding the significance of difference of mean academic achievements between each pair of groups.

<table>
<thead>
<tr>
<th>Pair of Groups</th>
<th>Mean Achievements</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(a). Boys</td>
<td>451.90</td>
<td>165.67</td>
<td>612</td>
<td>5.27</td>
<td>.000&lt;0.05</td>
<td>Significant difference at 0.05 level H₀&lt;sub&gt;1&lt;/sub&gt; rejected</td>
</tr>
<tr>
<td>(b) Girls</td>
<td>383.75</td>
<td>153.43</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2(a). Urban</td>
<td>487.64</td>
<td>121.83</td>
<td>612</td>
<td>22.71</td>
<td>.000&lt;0.05</td>
<td>Significant difference at 0.05 level H₀&lt;sub&gt;2&lt;/sub&gt; rejected</td>
</tr>
<tr>
<td>(b) Rural</td>
<td>251.40</td>
<td>114.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3(a). Gen caste</td>
<td>429.03</td>
<td>157.83</td>
<td>612</td>
<td>5.12</td>
<td>.000&lt;0.05</td>
<td>Significant difference at 0.05 level H₀&lt;sub&gt;3&lt;/sub&gt; rejected</td>
</tr>
<tr>
<td>(b) Backward caste</td>
<td>343.64</td>
<td>164.66</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Interpretation**

H₀<sub>1</sub> is rejected: So, it can be inferred that there is a significant difference between the mean scores obtained by boys and girls in their Academic Achievement.

H₀<sub>2</sub> is rejected: So, it can be inferred that there is a significant difference between the mean scores obtained by Urban and Rural students in their Academic Achievement.

H₀<sub>3</sub> is rejected: So, it can be inferred that there is a significant difference between the mean scores obtained by General caste and Backward caste students in their Academic Achievement.

**Analysis of data on research question**

As regards facilities received by the school students belonging to different categories, we can arrange the categories in decreasing order as follows based on opinions of the responsible school neighbors:
General caste > Urban students > Boys > Girls > Rural students > Backward caste. The help of private tutors, facilities of ICT etc. are enjoyed by General Caste students. They also get more time in learning as they are not engaged in domestic or any money earning works. They also receive help from their home environment. However Rural students have to be engaged more in works of domestic nature or money-earning.

Major findings
The findings of the present study are as follows.
1. There is a significant difference between boys and girl students as regards their academic achievement.
2. There is a significant difference between urban and rural students as regards their academic achievement.
3. There is a significant difference between General caste and backward caste students as regards their academic achievement.
4. The general caste and urban students are most privileged in getting an educational opportunity.

Limitations of the research
1. The schools were selected prima facie on the basis gender x locality keeping caste implicit, because it was well neigh impossible to select schools on basis of the criteria locality x gender x caste simultaneously.
2. The number of Backward Caste students are small in the sample for unavoidable reasons already stated. It might lead to an error in comparison.

Discussion:--
The result of the study shows that there exist significant differences among academic achievement gender-wise, locality-wise and caste-wise. The following table was prepared on the basis of mean scores of different groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>Boys</th>
<th>Girls</th>
<th>Urban</th>
<th>Rural</th>
<th>G Caste</th>
<th>B Caste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Academic Achievement</td>
<td>452</td>
<td>384</td>
<td>488</td>
<td>251</td>
<td>429</td>
<td>344</td>
</tr>
</tbody>
</table>

According to mean scores arranged in decreasing order, it is observed:
Urban>Boys>G caste>Girls>B caste>Rural

Based on opinions given by guardians, parents, and others on the educational facilities enjoyed by the students, the following hierarchy was observed

General caste > Urban students > Boys > Girls > Rural students > Backward caste.

On comparing the two hierarchies (I) & (II) we see that girls are even now in the middle and Backward Caste students are at the falling end.

Results of this study reveal that students differ significantly in their academic achievements locality-wise, caste-wise, and sex-wise. These observations agree with the findings of Talwar & Das (2014), Chahal & Yadav (2016) & Rumki Gupta (2017) for Rural & Urban students. In respect to the locality, the results of this study were supported by Raju (2013), Talwar & Das (2014), Sinha (2016), Yadav & Chahal (2016), Puhan & Nibedita (2017), and Hooda & Devi (2017). In respect of the castes this study still displays the same dismal picture as portrayed by Chattopadhyay (1998).

Educational implication of the study
1. The study will help to identify the important factors contributing to the academic achievement of the students.
2. Proper guidance and counseling are required primarily for rural and backward caste students by their teachers.
3. The study will help to select suitable TLM for the backward caste students in their classroom situation for giving audio & visual supports in case they face any communication difficulty because of linguistic problems.

Scope of further study
Based on the present study, the investigator would like to put the following suggestions for further studies;
1. The study may be repeated for different grades and different education boards.
2. This study may be extended to the students of different streams of education in Higher Secondary Classes onward.
Conclusion:
Gender, location, and caste have still significant effects on the academic achievement of the students in schools, particularly at the secondary level. The educational facilities enjoyed by the General Caste and Urban students at home and schools should also be extended to Girls, Rural students, and Backward students.

Acknowledgement:
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References:
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