Comparative study of the academic achievement of 10th class boys and girls studying in different high schools of District Pulwama of (J&K)

Aamina Parveen, Syed Noor-Ul-Amin* and Syed Khushnooda Nazir

Department of Education, University Of Kashmir, Srinagar, Kashmir.

Accepted 12 February, 2013

The paper attempts to determine whether there are significant gender differences in academic performance among high school students of District Pulwama of (J&K). The study was carried out among 300 students (150 male and 150 female) high school students drawn randomly from 26 institutions of District Pulwama of (J&K). The instrument used for data collection was the Information Blank developed by the investigators. The data was subjected to statistical analysis by computing Mean, S.D. and test of significance. The results showed that the boys and girls have not shown any significant difference in academic achievement in General Science. Boys and girls have not shown any significant difference in academic achievement in Urdu. Boys and girls have not shown any significant difference in academic achievement in Maths. The academic achievement of boys is significantly higher than that of girls in General English. The academic achievement of boys is significantly higher than that of girls in Social Studies. In aggregate, the academic achievement of boys is significantly higher than that of girls.

Key words: Academic achievement, 10th class, high schools, Pulwama, J&K.

INTRODUCTION

Achievement is the end-product of all educational endeavours. Academic achievement of pupils refers to the knowledge attained and skills developed in school subjects. So, academic achievement means the achievement of students in the academic subjects in relation to their knowledge attaining ability or degree of competence in school tasks usually measured by standardized tests and expressed in grades or units based on pupil’s performance. Academic achievement is of paramount importance. It has been indicated that a good number of variables such as; personality characteristics of the learners, the organizational climate of the school, curriculum planning, teaching learning setup, variables arising out of home, influence achievement in different degrees. Each of them is actually a cluster of variables which individually or on interaction with others have their influence on achievement.

The world is becoming more and more competitive. Quality of performance has become the key factor for personal progress. Parents desire that their children climb the ladder of performance to as high a level as possible. This desire for a high level of achievement puts a lot of pressure on students, teachers, and schools and in general the education system itself. In fact, it appears as if the whole system of education revolves around the academic achievement of students, though various other outcomes are also expected from the system. Thus a lot of time and effort of the schools are used for helping students to achieve better in their scholastic endeavours. The importance of scholastic and academic achievement has raised important questions for educational researchers. What factors promote achievement in students? How far do the different factors contribute towards academic achievement? (Ramaswamy, 1990). Both nature and nurture plays a combined role in making an achieving individual. Sinha (1970) explains it as “Students whose academic performance is superior in the
form of high percentage of marks are taken as successful candidates. On the other hand students who fail in the previous examination and obtain low divisions in their examination are considered as individuals who have failed on their achievements”. Good (1959) refers to academic achievement as, “The knowledge attained or skills developed in the school subjects usually designated by test scores or marks assigned by the teacher”. Royce (2009) has conducted a study on the grade integrity and the representation of academic achievements and found that the student’s performance or academic achievement is to some extent affected by the grade integrity. Sharmistjha (2008) has made a comparative study of factors affecting academic achievement of school going adolescent boys and girls. It was found that the factors like daily routine of the students, tuitions, content viewed on TV were positively correlated with academic achievement and there is not much difference in the importance of the selected factors exhibited by boys and girls. Sharma (2007) made a study on academic achievement as a function of curiosity in late childhood and the results reveal that in case of boys, there was a significant difference between academic achievement and curiosity while as in case of girls there was no significant difference between academic achievement and curiosity. Kobal and Musek (2001) revealed that self concept is significantly correlated with academic achievement. Sood (1991) revealed that academic achievement of pre-engineering students in relation to their socio-economic status and he has found that there was no significant relationship between academic achievement and socio-economic status. Ojwala (1990) has established that girls had significantly higher academic achievement than boys and academic achievement showed positive and significant correlation with intelligence. Madhu and Grewal (1990) emphasized that home environment of the students and planning of schedule was significantly related to their academic achievement. Student’s habits and interests also influenced their academic achievement. Painta and Walsh (1996) emphasized the Importance of home factors and parent involvement influencing academic achievement. Tiwari and Bansal (1994) mentioned that a child with high academic achievement is likely to be well-tREATED as well behaved and independent and low achievers as incapable and deprived of employment, which may lead this to maladjustment to life. In our society academic achievement is considered as a key criterion to judge one’s total potentialities and capacities. Hence academic achievement occupies a very important place in education as well as in the learning process. Academic achievement is defined by Crow and Crow (1969) as the extent to which a learner is profiting from instructions in a given area of learning that is, achievement is reflected by the extent to which skill and knowledge has been imparted to him. Academic achievement also denotes the knowledge attained and skill developed in the school subject, usually designated by test scores. Achievement is influenced by personality, motivation, opportunities, education and training.

Academic achievement means achievement of students in the academic subjects in relation to their knowledge attaining ability usually measured by standardized tests and expressed in units based on pupil’s performance. Academic achievement is of paramount importance. Studies have been conducted from time to time on academic achievement. The present investigator also felt a need to conduct this research because various studies have been conducted on academic achievement in different places but no study has been conducted in district Pulwama of Kashmir. Therefore the present investigator has made a humble attempt to conduct a comparative study of the academic achievement of 10th class boys and girls studying in different high schools of district Pulwama Kashmir. With the help of this study, we may come to know whether the academic achievement of boys and girls is same. If there is difference in the academic achievement of boys and girls that is, the academic achievement of boys is higher than that of girls, then proper methodology will be used for improving the academic achievement of girls. The most important role in the academic achievement is played by a teacher. A teacher after knowing the academic achievement of girl students can change his teaching methodologies, teaching aptitude and attitude towards this group in order to get good academic results. The present study shall be the guideline for the future education trainers, teachers and policy makers while taking any decision regarding the education of girl students.

OBJECTIVES

The following objectives have been formulated for the present study:

1. To study the academic achievement of 10th class boys of different high schools of District Pulwama of (J&K)
2. To study the academic achievement of 10th class girls of different high schools of District Pulwama of (J&K)
3. To compare the 10th class boys and girls of different high schools of District Pulwama of (J&K) on academic achievement.

HYPOTHESIS

The following hypothesis has been formulated for the present investigation:

1. The 10th class boys and girls differ significantly on academic achievement.
Table 1. Significance of mean difference between 10th class boys and girls on academic achievement of (G. English subject) of different high schools of District Pulwama.

<table>
<thead>
<tr>
<th>Group</th>
<th>Total number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>150</td>
<td>63.19</td>
<td>±17.33</td>
<td>6.20</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Girls</td>
<td>150</td>
<td>51.35</td>
<td>±15.71</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

G. English

![Bar chart showing mean academic achievement of boys and girls in G. English subject]

Gender

Figure 1. Academic achievement of 10th class boys and girls of different high schools of District Pulwama in G. English subject.

2. The academic achievement of boys is significantly higher than that of girls.

METHODOLOGY AND PROCEDURE

Sample

The present study was conducted on a sample of 300 students i.e., 150 boys and 150 girls reading in 10th class drawn randomly from 26 institutions of District Pulwama of (J&K). The list of all high schools in District Pulwama of (J&K) was obtained from the CEO’s office of the said District. Thereafter, 26 high schools from the available list were drawn for the investigation.

Collection of data

Tools

The investigator collected the data for the present study from different high schools of District Pulwama of (J&K).

Statistical analysis

The data was subjected to statistical analysis by computing Mean, S.D. and test of significance.

For this purpose Information Blank was developed by the investigators to ascertain the subject wise and aggregate marks obtained by the students in the 10th class and this served as a data for the present study.

Interpretation

A comparative look at Table 1 and Figure 1 depicts that in general English, the boys had a mean academic achievement score of 63.19 and the girls exhibited a mean academic achievement score of 51.35. The obtained t-value is 6.20 significant at 0.01 levels. Thus the boys possess high academic achievement than the girls in G. English subject.

An examination of Table 2 and Figure 2 reveals that in Urdu subject, boys had a mean academic achievement...
Table 2. Significance of mean difference between 10th class boys and girls on academic achievement of (Urdu subject) of different high schools of District Pulwama.

<table>
<thead>
<tr>
<th>Group</th>
<th>Total number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>150</td>
<td>60.63</td>
<td>±18.43</td>
<td>0.67</td>
<td>insignificant</td>
</tr>
<tr>
<td>Girls</td>
<td>150</td>
<td>59.24</td>
<td>±17.48</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Urdu**

![Bar graph showing mean scores of boys and girls in Urdu subject.]

**Gender**

Figure 2. Academic achievement of 10th class boys and girls of different high schools of District Pulwama in Urdu subject.

Table 3. Significance of mean difference between 10th class boys and girls on academic achievement of (Mathematics subject) of different high schools of District Pulwama.

<table>
<thead>
<tr>
<th>Group</th>
<th>Total number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>150</td>
<td>60.81</td>
<td>±22.45</td>
<td>1.93</td>
<td>insignificant</td>
</tr>
<tr>
<td>Girls</td>
<td>150</td>
<td>56.14</td>
<td>±19.38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The data in Table 3 and Figure 3 reveals that in Mathematics subject, boys had a mean academic achievement score of 60.81 and the girls exhibited a mean academic achievement score of 56.14. The obtained t-value is 1.93 which is less than the tabulated t-value 1.98 at 0.05 level of significance, which depicts that there is no significant difference between the academic achievement of boys and girls in Mathematics subject.
there is no significant difference between the academic achievement of boys and girls in Mathematics subject. Table 4 and Figure 4 depict that in G. Science subject, boys had a mean academic achievement score of 62.55
Table 5. Significance of mean difference between 10th class boys and girls on academic achievement of (Social Studies) of different high schools of District Pulwama.

<table>
<thead>
<tr>
<th>Group</th>
<th>Total number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>t-value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>150</td>
<td>59.36</td>
<td>±18.91</td>
<td>2.51</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Girls</td>
<td>150</td>
<td>54.06</td>
<td>±17.65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

S. St

![Bar chart showing mean academic achievement of boys and girls in Social Studies](chart.png)

Gender

Figure 5. Academic achievement of 10th class boys and girls of different high schools of District Pulwama in Social Studies subject.

Table 6. Significance of mean difference between 10th class boys and girls on academic achievement of (Aggregate Marks) of different high schools of District Pulwama.

<table>
<thead>
<tr>
<th>Group</th>
<th>Total number (n)</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>t-value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>150</td>
<td>307.97</td>
<td>±86.71</td>
<td>3.03</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Girls</td>
<td>150</td>
<td>279.63</td>
<td>±74.67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

and the girls exhibited a mean academic achievement score of 58.77. The obtained t-value is 1.96 which is less than the tabulated t-value 1.98 at 0.05 level of significance, which depicts that there is no significant difference between the academic achievement of boys and girls in G. Science subject.

The data in Table 5 and Figure 5 that in Social Studies, the boys had a mean academic achievement score of 59.36 and the girls exhibited a mean academic achievement score of 54.06. The obtained t-value is 2.51 significant at 0.01 level. Thus the boys possess high academic achievement than the girls in Social Studies subject.

The data in Table 6 and Figure 6 reveals that the aggregate academic achievement score of boys had a mean value of 307.97 and the mean value of aggregate academic achievement score of girls is 279.63. The obtained t-value is 3.03 which exceed the tabulated t-value 2.59 at 0.01 level of significance.

This depicts that in aggregate, the boys possess high academic achievement than the girls. The overall results indicated as the boys and girls have not shown any significant difference in academic achievement in General Science. Boys and girls have not shown any significant difference in academic achievement in Urdu. Boys and girls have not shown any significant difference in academic achievement in Maths. The academic achievement of boys is significantly higher than that of girls in General English. The academic achievement of boys is significantly higher than that of girls in Social
Studies. In aggregate, the academic achievement of boys is significantly higher than that of girls. The results are in agreement with the findings of the earlier researchers as, Robinson (1965); Malathi (1987); Suneetha and Mayuri (2001); Sujata (2003); Singh (1984); Vijayalaxmi and Natesan (1992); Kaur and Gill (1993); Joshi (2000); Fergusson and Horwood (1997) and Linver et al. (2002).

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Figure 6. Academic achievement of 10th class boys and girls of different high schools of District Pulwama in aggregate marks.
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