

# Socio-Economic Factors And Academic Performance Of Children In District Doda Of Jammu & Kashmir, India

Dr. Om Raj Katoch<sup>1</sup>, Dr. Romesh Sharma<sup>2</sup>, Sarita Parihar<sup>3</sup>

<sup>1</sup>Corresponding Author: Faculty, Department of Economics, Govt. Degree College Batote, affiliated to University of Jammu, Jammu & Kashmir, India, E-mail: [orkatoch@gmail.com](mailto:orkatoch@gmail.com), <https://orcid.org/0000-0001-8073-8985>

<sup>2</sup>Faculty, Department of Economics, Govt. Degree College (Boys) Udhampur, J&K, affiliated with University of Jammu, India. Email: [sharmaromesh75@gmail.com](mailto:sharmaromesh75@gmail.com).

<sup>3</sup>Faculty, Department of Economics, Govt. Degree College Kishtwar, J&K, affiliated with University of Jammu, India. Email: [saritaparihar.eco@gmail.com](mailto:saritaparihar.eco@gmail.com).

## Abstract:

Education plays an instrumental role in the economic development and income generation of any nation. It has the ability to increase productivity in many ways, including by enabling workers to perform existing tasks more quickly, by facilitating the transfer of knowledge about new information, products, and technologies, and by enhancing the ability of a country to produce new knowledge, products, and technologies. With the possibility of a correlation between academic performance and quality of life, the present study aimed to evaluate the academic performance of 6–14-year-old school going children and the association between socioeconomic factors and academic performance of children. The academic performance of the children was assessed by using marks or grades obtained in the last or the annual examination passed. Data were entered and analysed using statistical software epi info 7. Results show that low levels of academic performance in the school were associated with lower caste, higher birth orders, lower parental education and occupational levels, not attending anganwadi centres (ACs) as pre-schooling, living in kachcha houses, houses with limited available space, low levels of school attendance, and fewer teachers in the school. Socio-economic factors have a great deal of influence on the academic performance of children in school. It is vital for policy-makers to focus their attention on such issues in order to improve the performance of children in school.

**Keywords:** academic performance, socio-economic factors, school-going children, education

## 1. Background

Education is a fundamental process of human life, as it is alleviating poverty (Brown & James, 2020), work as an equalizer within society (Nada & Zoran, 2019), provide equality of opportunity (Aiyar & Ebeke, 2020) and determine the health status of an individual (Katoch, 2022). Adequate education improves

people's understanding of the world around them which makes them less vulnerable to the influence of others (OECD, 2012). It has a positive impact on the income, wages and economic growth of every nation. School performance determines the nature of occupations, salary levels and status of individuals in the society (Quinn & Rubb, 2006). Education has the ability to increase

productivity by enabling workers to perform existing tasks more quickly, by facilitating the transfer of knowledge about new information, products, and technologies, and by increasing creativity by enhancing the ability of a country to produce new knowledge, products, and technologies (Grant, 2017). In addition to improving people's understanding of themselves, education improves the quality of their lives, raises productivity and creativity, inspires entrepreneurship and technological advances that lead to economic and social progress and income distribution (Ozturk, 2001).

Educational attainment or academic performance is influenced by parental background (Ribeiro et al., 2019), (Abera Gobena, 2018), parental socio-economic status (Poon, 2020), (Rodríguez-Hernández et al., 2020), parental involvement (Otani, 2019) as well as many other socioeconomic factors. For instance, according to a study conducted in Dhaka, Bangladesh (Husain SA & Syed SH, 2016)), there is a significant association between parental educational background, receiving scholarships, household income level, etc., and academic achievement in the school. Another study (Hojo, 2014) conducted in Japan found that family backgrounds has strongly affected the level of academic achievement of the students. Furthermore, an analysis of a study conducted in Cambodia (Sothan, 2018) found that a number of variables, namely English ability, class attendance, study effort, academic self-efficacy, and family socio-economic status, were positively related to academic performance. The results of a study conducted in India showed that nutritional status of children is significantly correlated with academic performance at schools, which is important for human and economic development. It concluded that all the anthropometric failure indicators (low height, weight, and BMI for age) are negatively related to academic performance of the children in the schools (Katoch & Sharma, 2017).

Another study conducted (Ogunshola, 2012), in Nigeria with a sample of 180 school going children to know the effects of parental socioeconomic status on the academic performance of students. The four factors that were examined and statistically analyzed were: parental socio-economic background, parental educational background, parental educational qualifications and students' health statuses. It was found that parental socio-economic statuses and parental educational background did not have any significant effect on the academic performance of the students, while parental qualifications and students' health statuses affect the academic performance of the students significantly. In addition to these two variables that suggested significant influence, the nature of the students' home environment also played an important role in their academic success. School attendance is also seen as an important factor and has been linked with academic performance of the children at school (Anna et al., 2016), (Sekiwu et al., 2020) and (Luca Stanca, 2006).

## 2. Measurement of Academic Performance

A wide variety of academic subjects are used to evaluate students' academic performance. Classroom performance (Yaqoob et al., 2014), (Carrillo & Perez, 2012), continuous assessment (Samson & Allida, 2018), marks obtained in term end or final examinations (Katoch & Sharma, 2017), and standardized test scores are typically used by teachers and education officials to assess the achievement of the students (Sulphey et al., 2018). (Good, 2016) defines academic achievement as "the knowledge obtained or skills development in the school subjects usually designed by test scores or marks assigned by the teacher". It can be assessed by using various indicators of performance, such as marks or grade obtained in the final examination based on the curriculum (Sarma et al., 2013), (Lee & Manan, 2014) percentage of attendance in the school i.e, number of days the child attended the school in

a year (Hancock et al., 2013), (Naik et al., 2015) and marks obtained by the student in a test conducted by some agencies - universities, colleges, and recruiting boards etc for admission purposes (Ghosh, 2013) or providing employment. Some of the studies also used years of schooling completed, annual placement rates and award received etc. for measuring the school outcomes.

For the present study, academic performance of the sampled children was assessed by using the marks or grades that students had obtained in all subjects in the final or annual examination.

### 3. Objectives

The following objectives were set up for the present study:

- a) To assess the academic performance of the children (6-14 years) in the area under study.
- b) To identify the socio-economic factors associated with the academic performance of the children in the school.

### 4. Methods & Material

As part of this study, we evaluated the academic performance of the school-going children residing in district Doda of Jammu & Kashmir, because academic performance may be a leading indicator for obtaining admission into good/prestigious schools, being shortlisted for a job, and earning more in the long run (Rudakov&Roshchin, 2019), (Kool et al., 2016). Considering the possible correlation between academic performance and the quality of life, it is imperative to understand the factors that may be associated with academic performance of the students.

- a. Area under Study: The study was carried out in rural areas of district Doda, Jammu and

Kashmir. Out of ten educational zones (Doda, Assar, Gundna, Bhagwa, Bhalla, Bhalessa, Thathri, Ghatt, Bhatyas, and Bhaderwah) three zones - Assar, Doda and Bhagwa were chosen randomly for the purpose of collecting data for the present study.

- b. Sample size: After choosing the three educational zones - i.e. Assar, Bhagwa and Doda randomly, three hundred sixty students were selected from 30 schools after selecting 10 schools from each zone. To select a random sample, a list of students' names was obtained for the school teachers and a random drawing of 12 names from each school was selected for the purposes. In this way 360 school-going children between the age group of 6-14 years constituted the study sample for the present study.
- c. Questionnaire: We obtained information on previous years' results/grades, days spent at school in the previous session, and child's birth date through a well-designed questionnaire via school visits. The information on socio-economic indicators of the children was collected by visiting their homes.
- d. Academic Performance: In the present study, the academic performance of the students was evaluated by using grades or marks obtained in the last or the annual examination passed - grades included the overall percentage of marks obtained in all the subjects. Grades were

categorized into four sub-categories based on the scale of percentages of marks obtained

in the last examination passed. The followings were the cut-off point used:

Table 1.2 Sub-categories and Cut-off Points

Sr. No	Cut-off Points	Sub-categories
1	$\geq 75$ %	Excellent
2	60 – 74 %	Very Good
3	45 – 59 %	Good
4	33 – 44 %	Average

e. School Attendance: The status of school attendance was divided into four sub-categories i.e., Regular, Indicated, Moderate and Severe. The range of sub-categories of attendance of children to determine the

performance in terms of attendance in the school is adopted from (Hancock et al., 2013). On the basis of the scale of percentages of attendance, the followings were the cut-off point used in the present study:

Table 1.1 Sub-categories and Cut-off Points for School Attendance

Sr. No	Cut-off Points	Sub-categories
1	$\geq 90$ %	Regular
2	80 - 89 %	Indicated
3	60 - 79 %	Moderate
4	$\leq 60$ %	Severe

Source: (Hancock et al., 2013).

f. Factors studied: For the association with the academic performance of the school going children; the socio-economic factors included – gender, religion, social category, birth orders,

educational and employment levels of mothers and fathers, family type, economic status i.e. Anthodia/BPL/APL, nature of house, number of rooms available in the home, attendance status at school,

number of teachers in the school etc.

- g. Statistical Analysis: Data was entered and analyzed using statistical software epi info 7 (available at [www.cdc.gov](http://www.cdc.gov)). Chi-square tests were used for testing the significance of association between the socioeconomic factors and academic performance of the students.

## 5. Results & Discussion

A total of 360 students (female -176, male -184) were taken into task in the present study. Only two religions were found in the area under study i.e Hindu – consisting of 62.22% of the sample and Muslim - consisting of 37.78% of the sample subjects. From a total of 360 children aged 6 - 14 years included in the analysis, 41.85% of male and 35.23% of female had excellent academic performance, and 33.15% of male and 39.77% of female had very good academic performance in the examination passed in the previous session. Girls outperform boys in the excellent performance category. It was found that in terms of excellent academic performance, the boys were at higher risk of low academic performance as compared to girls Table 1.3. about 71.00% of the Hindu students had excellent academic performance as compared to 34.50% of Muslim students. However, no significant difference was observed as far as the gender and religion of the children was concerned.

It was found that 56.39% of all births were 1<sup>st</sup> – 2<sup>nd</sup> order births, 39.89% were 3<sup>rd</sup> – 4<sup>th</sup> order births. 7.50% were 5<sup>th</sup> – 6<sup>th</sup> order births and only 2.22% births were having 7<sup>th</sup> order births. When the data was analysed on the basis of birth order to see the difference between the academic achievement of lower and higher birth order, the findings of the present study revealed that the excellent academic performance decreases with increase in births order of the children in

the family having significant difference ( $\chi^2=22.8999$ ;  $df = 9$ ;  $P < 0.01$ ). The reason may be that the time constraints limit the parents to give adequate care to all the children especially when their number increases in the family.

The educational level of the mothers varied from no formal education to higher education. This variability was also reflected in the occupational structure of the mothers. The findings of the present study revealed that 60.63% of school going children lived with mothers without having any formal education, 20.11% with mothers who had primary education, and 12.64% of mothers had secondary education and only 6.61% of mothers had higher education. For fathers, the corresponding percentages were 28.86%, 32.36%, 24.49% and 14.29% respectively. The formal education was higher among fathers than mothers. Parental educational attainment is being claimed to be the most positive and influential socioeconomic factors for determining the academic performance of the children. For example, a study conducted in Nigeria by (Aromolaran et al., 2013) in which the data of 600 students were collected found that parents' educational level and the number of children in the family were strongly correlated with the academic performance of the children in the school. In the present study, it was revealed that both mothers' ( $\chi^2 = 39.5949$ ;  $df = 9$ ;  $P < 0.05$ ) and fathers' ( $\chi^2 = 33.9991$ ;  $df = 9$ ;  $P < 0.01$ ) schooling have a large and statistically significant impact on the academic performance of the children. These findings of the present study are consistent with many studies like (Ibrahim & Al-Matalka, 2014), (Suleman et al., 2012), (Katoch, 2017) and (Sorhaindo & Feinstein, 2006).

The results further show that 91.95% of children had mothers who were housewives, and only 8.05% of children had working mothers. More than half of the children (53.06%) had father having farmer as their occupation, 13.99% had fathers who were

government employees, 16.03% had privately employed and 16.91% were labourers. Results of the study further indicated that parental occupation is an important determinant of academic performance. As it was found that the children of mothers and fathers having government jobs show higher academic performance as compared to children of housewives' mothers ( $\chi^2 = 15:684$ ;  $df = 3$ ;  $P < 0:01$ ) and farmer/labour fathers ( $\chi^2 = 26:7535$ ;  $df = 9$ ;  $P < 0:01$ ). The findings of the present

study are in line with a study conducted in Jordan ([Ibrahim & Al-Matalka, 2014](#)) that shows parents with high occupational status are more likely to help their children receive a better education while providing skills, knowledge, tools, and instruments the children need. Results are also consistent with ([Suleman et al., 2012](#)). The PISA report(2014) also shows that parents' occupation appears to influence the level and extent of children's academic performance in the schools([OECD, 2014](#)).

Table 1.3 Socio-economic factors and academic performance of students (6-14 years)

Variable	Academic Performance of the Children					$\chi^2$
	N=360	Excellent	Very Good	Good	Average	
<b>Gender</b>						
Female	176 (48.89)	62 (35.23)	70 (39.77)	40 (22.73)	4 (2.27)	$\chi^2 = 4.1554^*$
Male	184 (51.11)	77 (41.85)	61 (33.15)	45 (24.46)	1 (0.54)	
<b>Religion of the child</b>						
Hindu	224 (62.22)	92 (41.07)	80 (35.71)	48 (21.43)	4 (1.79)	$\chi^2 = 2.8722^*$
Muslim	136 (37.78)	47 (34.50)	51 (37.50)	37 (27.20)	1 (1.74)	
<b>Birth Order of the child</b>						
1 <sup>st</sup> - 2 <sup>nd</sup>	203 (56.39)	94 (46.31)	62 (30.54)	62 (30.54)	03 (14.78)	$\chi^2 = 22.8999$ P < 0.01
3 <sup>rd</sup> - 4 <sup>th</sup>	122 (33.89)	40 (32.79)	54 (44.26)	26 (21.31)	2 (1.64)	
5 <sup>th</sup> - 6 <sup>th</sup>	27 (7.50)	5 (18.52)	12 (44.44)	10 (37.04)	0 (0.00)	
≥ 7 <sup>th</sup>	8 (2.22)	0 (0.00)	3 (37.50)	5 (62.50)	0 (0.00)	
<b>Is child an Orphaned?</b>						
No	333 (92.50)	130 (39.04)	177 (35.14)	82 (24.62)	4 (1.20)	$\chi^2 = 10.1077^*$
Paternally Orphaned	15 (4.17)	5 (33.33)	6 (40.00)	3 (20.00)	1 (6.67)	
Maternally Orphaned	10 (2.78)	3 (30.00)	7 (70.00)	0 (0.00)	0 (0.00)	
Both	2 (0.56)	1 (50.00)	1 (50.00)	0 (0.00)	0 (0.00)	
<b>Mother's Educational Level (n=348)</b>						
No Formal Education	211 (60.63)	63 (29.86)	82 (38.86)	62 (29.38)	4 (1.90)	$\chi^2 = 39.5949$

Primary Education	70 (20.11)	27 (38.57)	30 (42.86)	12 (17.14)	1 (1.43)	P < 0.01
Secondary Education	44 (12.64)	26 (59.09)	7 (15.01)	11 (25.00)	0 (0.00)	
Higher Education	23 (6.64)	19 (82.61)	4 (17.39)	0 (0.00)	0 (0.00)	
<b>Father's Educational Level (n=343**)</b>						
No Formal Education	99 (28.86)	25 (25.25)	37 (37.37)	35 (35.35)	2 (2.02)	$\chi^2=33.9991$ P < 0.01
Primary Education	111 (32.36)	36 (32.43)	50 (45.05)	24 (21.62)	1 (0.90)	
Secondary Education	84 (24.49)	39 (46.43)	28 (33.33)	16 (19.05)	1 (1.19)	
Higher Education	49 (14.29)	33 (67.35)	9 (18.37)	7 (14.29)	0 (0.00)	
<b>Mother's Occupation (n=348**)</b>						
House wife	320 (88.89)	115 (35.94)	118 (36.88)	83 (25.94)	4 (1.25)	$\chi^2=15.6841$ P < 0.01
Govt. Employed	28 (7.78)	20 (71.43)	5 (17.86)	2 (7.14)	1 (3.57)	
<b>Father's Occupation (n=343)</b>						
Farmer	182 (53.06)	51 (28.02)	76 (41.76)	51 (28.02)	4 (2.20)	$\chi^2= 26.7535$ P < 0.01
Govt. Employed	48 (13.99)	31 (64.58)	10 (20.83)	7 (4.58)	0 (0.00)	
Pvt. Employed	55 (16.03)	25 (45.45)	19 (34.55)	11 (20.00)	0 (0.00)	
Labourer	58 (16.91)	26 (48.83)	19 (32.76)	13 (22.41)	0 (0.00)	

**Source:** Field Survey, Values in parentheses are percentage, \* Not Significant, \*\*N=343 counts only live mothers &N=348 live fathers



Table 1.3 Continued .....

Variable	Academic Performance of the Children					$\chi^2$
	N=360	Excellent	Very Good	Good	Average	
<b>Type of Family</b>						
Nuclear Family	304 (84.44)	117 (38.49)	114 (37.50)	68 (22.37)	5 (1.64)	$\chi^2 = 2.8701^*$
Joint Family	56 (15.56)	22 (39.29)	17 (30.36)	17 (30.36)	0 (0.00)	
<b>Child attended Anganwadi Centre as pre-school</b>						
Yes	248 (77.50)	107 (43.15)	80 (32.26)	57 (22.98)	4 (1.61)	$\chi^2 = 8.4031$ P < 0.05
No	112 (35.00)	32 (28.57)	51 (45.54)	28 (25.00)	1 (0.89)	
<b>School Attendance of child</b>						
Regular	200 (62.50)	94 (47.00)	72 (36.00)	33 (16.50)	1 (0.50)	$\chi^2 = 41.2242$ P < 0.01
Indicated	127 (39.69)	36 (28.35)	50 (39.37)	38 (29.92)	3 (2.36)	
Moderate	29 (9.06)	9 (31.03)	7 (24.14)	13 (44.83)	0 (0.00)	
Severe	4 (1.25)	0 (0.00)	2 (50.00)	1 (25.00)	1 (25.00)	
<b>Economic status of the family</b>						
Anthodia	32 (10.00)	2 (0.00)	19 (3.13)	8 (12.50)	3 (43.75)	$\chi^2 = 35.3447$ P < 0.01
BPL	188 (58.75)	67 (17.55)	67 (12.23)	52 (17.55)	2 (23.94)	
APL	140 (43.75)	70 (50.00)	44 (31.43)	25 (17.86)	1 (0.71)	
<b>Social Category of the child</b>						
GEN	258 (71.67)	115 (44.57)	86 (33.33)	55 (21.32)	2 (0.78)	$\chi^2 = 42.971$ P < 0.01
SC	72 (20.00)	18 (25.00)	29 (40.28)	22 (30.56)	3 (4.17)	
ST	18 (5.00)	2 (11.11)	11 (61.11)	5 (27.78)	0 (0.00)	
OBCs	12 (3.33)	4 (33.33)	5 (41.67)	3 (25.00)	0 (0.00)	
<b>Nature of House</b>						
Pucca	95 (29.69)	52 (54.74)	25 (26.32)	17 (17.89)	1 (1.05)	$\chi^2 = 36.1165$ P < 0.01
Semi-Pucca	67 (20.94)	38 (56.72)	16 (23.88)	12 (17.91)	1 (1.49)	
Kachcha	198 (61.88)	49 (24.75)	90 (45.45)	56 (28.28)	3 (1.52)	

**No. of rooms in the house**

1 - 2 rooms	174 (54.38)	49 (28.16)	67 (38.51)	55 (31.61)	3 (1.72)	$\chi^2 = 33.8105$ P < 0.01
3 - 4 rooms	153 (47.81)	65 (42.48)	60 (39.22)	26 (16.99)	2 (1.31)	
5 - 6 rooms	27 (8.44)	20 (74.07)	3 (11.11)	4 (14.81)	0 (0.00)	
≥ 7 rooms	6 (1.88)	5 (83.33)	1 (16.67)	0 (0.00)	0 (0.00)	

**No. of teachers in the school**

≤ 2 teachers	149 (46.56)	47 (31.54)	55 (36.91)	45 (30.20)	2 (1.34)	$\chi^2 = 12.3369$ P < 0.01
3 - 5 teachers	71 (22.19)	25 (35.21)	29 (40.85)	15 (21.13)	2 (2.82)	
≥ 6 teachers	140 (43.75)	67 (47.86)	47 (33.57)	25 (17.86)	1 (0.71)	

**Source:** Field Survey, Values in parentheses are percentages, \* not significant, SC – schedule caste, ST-schedule tribe, OBC-other backward caste, BPL-below poverty line, APL-above poverty line

Many studies show that large family size has an adverse impact on the academic performance of the children. For example, a study conducted in Pakistan (Suleman et al., 2012) analyzed 360 children of elementary level to know the effect of family type on the academic performance of the children found that children belonging to nuclear family showed better performance as compared to the children of the joint family. However, results in the present study revealed that there was no significant difference between the type of family and academic performance of children.

The Integrated Child Development Scheme (ICDS) is a central programme implemented through the state governments, designed to meet the health, nutritional, and educational needs of the poor and vulnerable infants, pre-school aged children, and women in their childbearing years. Results in the present study found that 43.15 % of the children had excellent academic performance who had attended Anganwadi Centers as a pre-schooling as compared to 28.57 % who had not attended the center. The results were found statistically significant ( $\chi^2 = 8.4031$ ,  $df = 3$ ,  $P < 0.05$ ). The reason for this could be that the children besides nutritional supplements learned many things at the Anganwadi Centre before entering into the mainstream schools.

About 55.56 % of the school-going children attended school regularly and had no educational risk (regular) at all, 35.28 % of the children were in 'indicated', 8.08% in 'moderate' and 1.11% were in 'severe' educational risk. School attendance is considered as an important factor in determining academic performance of the children (Hancock et al., 2013). The results of the present study indicated that close to the majority (47.00%) of the children had regular presence in the school (at no educational risk) having attendance above 90% scored excellent academic performance compared to 28.35% whose attendance was between 80% – 89% (indicated) and no child had scored excellent

grade who was at severe educational risk. The results of this study are in agreement with the findings of studies conducted in Nigeria (Olufunke & Oluwadamilola, 2014), which demonstrated a positive correlation between students' attendance scores and academic performance and Bangladesh (Komakech, 2015), which revealed that students' attendance is a pre-condition for their academic success. The students with a higher rate of attendance also appear to have greater learning gains and fewer repetitions than absentee students.

Economic status of the household is an important factor in the determination of the academic performance of the children. For example, a study by (Osonwa et al., 2013) entitled "Economic status of parents, a determinant of academic performance of senior secondary school students in Ibadan, Nigeria" revealed that there is a significant relationship between the economic status and academic achievement of students. Those from lower income households scored significantly lower grades than the children from higher income households. Results indicated in the present study that the academic performance of children whose families belong to Anthodia and Below Poverty Line (BPL) households were lower than the children whose families belong to Above Poverty Line (APL). These results were found statistically significant ( $\chi^2 = 35.3447$ ,  $df = 6$ ,  $P < 0.01$ ). The findings were consistent with that of the findings of (Osonwa et al., 2013), (Rodríguez-Hernández et al., 2020), (Olufunke & Oluwadamilola, 2014), and (Suleman et al., 2012).

It was found that a high proportion (71.67%) of the children belong to general category (GEN), Schedule Caste (SCs) category accounts for 20.00%, Schedule Tribe (STs) 5.00% and Other Backward Classes (OBCs) 3.33% only. It is evident from the Table 1.3 that the excellent academic performance of children from General Category (GEN), Scheduled Caste (SCs), Scheduled Tribes (STs) and Other Backward Classes (OBCs) was 44.57%,

25.00%, 11.11% and 33.33% respectively. This clearly showed that the academic performance of the children of SCs and STs was lower than that of children from General Category (GEN) which was found statistically significant in the present study ( $\chi^2 = 42.971$ ;  $df = 9$ ;  $P < 0.01$ ). No significant difference was found between the orphaned children and their academic performance in the present study. This means, if opportunities are to be provided to these children, then they can also perform in a better way as the non-orphaned children performed.

Nature of house is also believed to remain an important determinant of academic performance of children. In the present study, it was found that 54.74% of the children had excellent academic performance who live in pucca houses as compared to 24.75% who lived in kachcha houses. A higher percentage of children (45.45%) had good academic performance living in kachcha houses as compared to 26.32% who live in pucca houses. These results were found statistically significant in the present study ( $\chi^2 = 36.1165$ ,  $df = 6$ ,  $P < 0.01$ ). The reason for this may be that the pucca houses are more associated with higher income level and educational level of the parents, which fulfill the entire needs of the children needed to perform better in the school. The study further found that the available space (number of rooms) in the house also positively associated with the excellent academic performance of the children which was found significant ( $\chi^2 = 33.8105$ ,  $df = 9$ ,  $P < 0.01$ ) in the present study. The findings are in line with the study conducted in Latin America which found that overcrowding is a negative and statistically significant factor that even exceeds the impact of certain maternal education levels on a child's academic performance (Contreras et al., 2019).

Teacher shortages have become an increasing problem. It is a real, large and growing (Emma García & Elaine Weiss, 2019). Research has found that a teacher can focus more on the

needs of each student when there are fewer students in a class. Students following the activity board properly and staying attentive is also easier with a low student-teacher ratio. A study conducted in Turkey (Koc&Celik, 2015) found a negative correlation between student teacher ratio and academic achievement. The study suggested that the academic performance of the students can be improved by decreasing the student-teacher ratio. Data from the present study revealed that the students from the schools having 3-5 teachers (35.21%) and  $\geq 6$  (47.86%) teachers indicated higher excellent academic performance as compared to the students enrolled in schools having  $\leq 2$  teachers (31.54). The results of the present study are supported by the findings of studies in Turkey (Koc&Celik, 2015), who asserted that higher student-teacher ratios were determined to be associated with lower academic achievement levels in cities with a large number of students per teacher, as well as in Nigeria (Ajani & Akinyele, 2014), where it was revealed that there is a significant relationship between the number of teachers in school (teacher- student ratio) and the academic achievements of students.

## 6. Conclusions and Policy Recommendations

In summary it can be concluded that there is a relationship between the various socio-economic factors and the academic performance of the students in the school. This is quite evident from the results of the present study that low level of academic performance in the school was among the children coming from lower social caste, higher birth orders, lower parental educational and occupational level, had not attended Anganwadi Centre as pre-schooling, lower economic status, living in kachcha type of houses, houses having less available space, and lower number of teachers in the school as compared to children coming from higher social castes, living in pucca houses, having educated parents, occupied lower birth orders in the family, attended school

regularly and enrolled in schools having higher number of teachers.

This is the first study of its kind to have been conducted in the region. Its purpose was to provide the basis for strategic planning in this area based on its findings. There is a great need to focus the attention of the policy-makers for intervening in the following areas so as to improve the academic performance of the children in the school.

1. Education of parents has a huge effect on the academic performance of the children in the school. In order to reach as many potential parents as possible, it is essential to provide education to all sections, especially to those living in kachcha houses and those from lower economic and social strata.
2. It is crucial to reinforce/monitor Anganwadi Centers (ACs) periodically in order to ensure that they are being used by beneficiaries.
3. The student-teacher ratio in the school must be reduced to an adequate level in order to focus more on the individual needs of each student.

## 7. Acknowledgement

The authors gratefully acknowledge the support and co-operation extended by the children, parents and school administration participated in the field survey.

## 8. Conflicts of Interest

The author declared that there is no conflict of interest.

## References

1. Abera Gobena, G. (2018). Family Socio-economic Status Effect on Students' Academic Achievement at College of Education and. *Journal of Teacher Education and Educators*, 7(3), 207–222.
2. Aiyar, S., & Ebeke, C. (2020). Inequality of opportunity, inequality of income and economic growth. *World Development*, 136, 105115. <https://doi.org/10.1016/J.WORLDDEV.2020.105115>
3. Ajani, I. R., & Akinyele, O. B. (2014). Effects of Student-Teacher Ratio on Academic Achievement of Selected Secondary School Students in Port Harcourt Metropolis, Nigeria. *Journal of Education and Practice*, 5(24), 100–106. [www.iiste.org](http://www.iiste.org)
4. Anna, L., Paula, K., & Tomi, S. (2016). Relationship between class attendance and student performance. 2nd International Conference on Higher Education Advances, HEAd'16, 21-23 June 2016, València, Spain. <https://doi.org/10.1016/j.sbspro.2016.07.051>
5. Aromolaran, Adeyemi, Oyeyinka, Isaiah, Olukotun, Okon, & Benjamin. (2013). Binary Logistic Regression of Students Academic Performance in Tertiary Institution in Nigeria by Socio-Demographic and Economic Factors. *International Journal of Engineering Science and Innovative Technology (IJESIT)*, 2(4), 590–596. [http://www.ijesit.com/Volume%202/Issue%204/IJESIT201304\\_76.pdf](http://www.ijesit.com/Volume%202/Issue%204/IJESIT201304_76.pdf)

6. Brown, P., & James, D. (2020). Educational expansion, poverty reduction and social mobility: Reframing the debate. *International Journal of Educational Research*, 100, 101537. <https://doi.org/10.1016/J.IJER.2020.101537>
7. Carrillo, T., & Perez, J. (2012). Continuous Assessment Improved Academic Achievement and Satisfaction of Psychology Students in Spain. *Teaching of Psychology*, 39(1), 45–47. <https://doi.org/10.1177/0098628311430312>
8. Contreras, D., Delgado, J., & Riveros, G. (2019). Is home overcrowding a significant factor in children's academic performance? Evidence from Latin America. *International Journal of Educational Development*, 67, 1–17. <https://doi.org/10.1016/J.IJEDUDEV.2019.01.006>
9. Emma García, & Elaine Weiss. (2019). The teacher shortage is real, large and growing, and worse than we thought. <https://files.epi.org/pdf/163651.pdf>
10. Ghosh, S. (2013). Academic Performance and Nutritional Status – A Case Study on College Students in North Tripura. *IOSR Journal of Research & Method in Education (IOSRJRME)*, 1(4), 57–68. <https://doi.org/10.9790/7388-0145768>
11. Good, T. L. (2016). Teacher Effectiveness in the Elementary school: [Http://Dx.Doi.Org/10.1177/002248717903000220](http://dx.doi.org/10.1177/002248717903000220), 30(2), 52–64. <https://doi.org/10.1177/002248717903000220>
12. Grant, C. (2017). The contribution of education to economic growth. [https://assets.publishing.service.gov.uk/media/5b9b87f340f0b67896977bae/K4D\\_HDR\\_The\\_Contribution\\_of\\_Education\\_to\\_Economic\\_Growth\\_Final.pdf](https://assets.publishing.service.gov.uk/media/5b9b87f340f0b67896977bae/K4D_HDR_The_Contribution_of_Education_to_Economic_Growth_Final.pdf)
13. Hancock, K. J., Australia. Department of Education, E., & Telethon Institute for Child Health Research. (2013). Student attendance and educational outcomes: every day counts. 263.
14. Hojo, M. (2014). Determinants of Academic Performance in Japan. [Http://Dx.Doi.Org/10.2753/JES1097-203X390301](http://dx.doi.org/10.2753/JES1097-203X390301), 39(3), 3–29. <https://doi.org/10.2753/JES1097-203X390301>
15. Husain SA, & Syed SH. (2016). Determinants of education quality: what makes students' perception different? Determinants of education quality: what makes students' perception different? *Open Review of Educational Research*, 3(1), 52–67. <https://doi.org/10.1080/23265507.2016.1155167>
16. Ibrahim, F., & Al-Matalka, M. (2014). The Influence of Parental Socioeconomic Status on Their Involvement at Home. *International Journal of Humanities and Social Science*, 4(5). [www.ijhssnet.com](http://www.ijhssnet.com)
17. Katoch, O. R. (2017). Impact of Socio-Economic Factors on Nutritional Status of School Going Children A Study of Primary and Middle Schools in Rural Areas of District Doda in Jammu & Kashmir.

- <https://shodhganga.inflibnet.ac.in/handle/10603/219004>
18. Katoch, O. R. (2022). Determinants of malnutrition among children: A systematic review. *Nutrition*, 96, 111565. <https://doi.org/10.1016/j.nut.2021.111565>
  19. Katoch, O. R., & Sharma, A. (2017). Nutritional Status and Academic Performance: A Study on School-Aged Children in Rural Areas of Jammu & Kashmir, India. *Indian Journal of Social Research*, 58(5), 659–670. <http://academic-and-law-serials.com/component/content/article.html?id=1014>
  20. Koc, N., & Celik, B. (2015). ScienceDirect The Impact of Number of Students per Teacher on Student Achievement. *Procedia-Social and Behavioral Sciences*, 177, 12–14. <https://doi.org/10.1016/j.sbspro.2015.02.335>
  21. Komakech, R. A. (2015). School Attendance is a Pre-Requisite for Student Academic Performance in Universal Secondary Education Schools. *Journal of Social Science for Policy Implications*, 3(1). <https://doi.org/10.15640/jsspi.v3n1a3>
  22. Kool, A., Mainhard, M. T., Jaarsma, A. D. C., Brekelmans, M., & van Beukelen, P. (2016). Academic success and early career outcomes: Can honors alumni be distinguished from non-honors alumni? <http://Dx.Doi.Org/10.1080/13598139.2016.1238818>, 27(2), 179–192. <https://doi.org/10.1080/13598139.2016.1238818>
  23. Lee, Y. \*, & Manan, W. A. (2014). Nutritional status, academic performance and parental feeding practices of primary school children in a rural district in Kelantan, Malaysia. *Prog Health Sci*, 4.
  24. Luca Stanca. (2006). The Effects of Attendance on Academic Performance: Panel Data Evidence for Introductory Microeconomics on JSTOR. *Research in Economic Education*, 37(3), 251–266. <https://www.jstor.org/stable/30042715>
  25. Nada, K., & Zoran, J. (2019). Education and Reducing Income Inequalities – The Importance of Education in Maritime Studies. *Scientific Journal of Maritime Research*, 33, 191–204. <https://hrcak.srce.hr/file/333387>
  26. Naik, S., Itagi, S., & Patil, M. (2015). Relationship between nutritional status and academic achievement of Lambani school children. *International Journal of Recent Scientific Research*, 6(3), 3235–3238. <http://www.recentscientific.com>
  27. OECD. (2012). , Equity and Quality in Education: Supporting Disadvantaged Students and Schools. <https://www.oecd.org/education/school/50293148.pdf>
  28. OECD. (2014). Do Parents' Occupations Have an Impact on Student Performance? | PISA in Focus | OECD iLibrary. *PISA in Focus*, 36. [https://www.oecd-ilibrary.org/education/do-parents-occupations-have-an-impact-on-student-performance\\_5jz8mr7kp026-en](https://www.oecd-ilibrary.org/education/do-parents-occupations-have-an-impact-on-student-performance_5jz8mr7kp026-en)
  29. Ogunshola, F. (2012). The Effects Of Parental Socio-Economic

- Status On Academic Performance Of Students In Selected Schools In Edu Lga Of Kwara State, Nigeria. *International Journal of Academic Research in Business and Social Science*, 2(7), 230–239.
30. Olufunke, A., & Oluwadamilola, A. (2014). Attendance Dilemma and its Effects on the Academic Performance of Secondary Schools' Students in Osun State, Nigeria. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 1(4), 2349. [www.arcjournals.org](http://www.arcjournals.org)
31. Osonwa, O. K., Adejobi, A. O., Iyam, M. A., & Osonwa, R. H. (2013). Economic Status of Parents, a Determinant on Academic Performance of Senior Secondary Schools Students in Ibadan, Nigeria. *Journal of Educational and Social Research*, 3(1). <https://doi.org/10.5901/jesr.2013.v3n1p115>
32. Otani, M. (2019). Relationships between parental involvement and adolescents' academic achievement and aspiration. *International Journal of Educational Research*, 94, 168–182. <https://doi.org/10.1016/J.IJER.2019.01.005>
33. Ozturk, I. (2001). The role of education in economic development: A theoretical perspective. *Journal of Rural Development and Administration*, XXXIII (1), 39–47.
34. Poon, K. (2020). The impact of socioeconomic status on parental factors in promoting academic achievement in Chinese children. *International Journal of Educational Development*, 75, 102175. <https://doi.org/10.1016/J.IJEDUDEV.2020.102175>
35. Quinn, M. A., & Rubb, S. (2006). Mexico's labor market: The importance of education-occupation matching on wages and productivity in developing countries. *Economics of Education Review*, 25(2), 147–156. <https://doi.org/10.1016/J.ECONEDUREV.2005.01.003>
36. Ribeiro, L., Rosário, P., Núñez, J. C., Gaeta, M., & Fuentes, S. (2019). First-Year Students Background and Academic Achievement: The Mediating Role of Student Engagement. *Frontiers in Psychology*, 10, 2669. <https://doi.org/10.3389/FPSYG.2019.02669/BIBTEX>
37. Rodríguez-Hernández, C. F., Cascallar, E., & Kyndt, E. (2020). Socio-economic status and academic performance in higher education: A systematic review. *Educational Research Review*, 29, 100305. <https://doi.org/10.1016/J.EDUREV.2019.100305>
38. Rudakov, V., & Roshchin, S. (2019). The impact of student academic achievement on graduate salaries: the case of a leading Russian university. <https://doi.org/10.1080/13639080.2019.1617839>, 32(2), 156–180. <https://doi.org/10.1080/13639080.2019.1617839>
39. Samson, B., & Allida, V. (2018). The influence of continuous assessment on academic performance in primary schools of Ibulanku Sub-County, Iganga



- District (Uganda). *Baraton Interdisciplinary Research Journal*, 8, 1–7.
40. Sarma, M., Wijesinghe, D. G. N. G., & Sivananthawerl, T. (2013). The Effects of Nutritional Status on Educational Performance of Primary School Children in the Plantation Sector in Nuwara Eliya Educational Zone. *Tropical Agricultural Research*, 24(3), 203–214.
41. Sekiwu, D., Ssempala, F., & Frances, N. (2020). Investigating the relationship between school attendance and academic performance in universal primary education: The case of Uganda. *African Educational Research Journal*, 8(2), 152–160. <https://doi.org/10.30918/AERJ.8.2.20.017>
42. Sorhaindo, A., & Feinstein, L. (2006). What is the Relationship between Nutrition and Learning? In *Journal of the HEIA* (Vol. 13, Issue June 2006). [www.learningbenefits.net](http://www.learningbenefits.net)
43. Sothan, S. (2018). The determinants of academic performance: evidence from a Cambodian University. <https://doi.org/10.1080/03075079.2018.1496408>, 44(11), 2096–2111. <https://doi.org/10.1080/03075079.2018.1496408>
44. Suleman, Q., Aslam, H. D., Shakir, M., Akhtar, Dr. S., Hussain, Dr. I., & Akhtar, Z. (2012). Effects of Family Structure on the Academic Performance of Students at Elementary Level in District Karak, Khyber Pukhtunkhwa (Pakistan). *Journal of Sociological Research*, 3(2), 234–248. <https://doi.org/10.5296/JSR.V3I2.2358>
45. Sulphey, M. M., Saad Al-Kahtani, N., Malik Syed, A., & Saad AlKahtani, N. (2018). Relationship between admission grades and academic achievement The International Journal ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES. 5(3), 648–658. [https://doi.org/10.9770/jesi.2018.5.3\(17\)ï](https://doi.org/10.9770/jesi.2018.5.3(17)ï)
46. Yaqoob, N., Bhatti, S., & Javed, M. (2014). Class test performance can be a predictor of scores in Annual Exam for a Preclinical Medical Student. *Jumdc*, 5(2). <http://jumdc.tuf.edu.pk/articles/volume-5-2/OrignalArticle7.pdf>