

PREVALENCE OF SCHOLASTIC BACKWARDNESS AMONG LOWER PRIMARY SCHOOL STUDENTS IN ERNAKULAM DISTRICT, KERALA

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ABSTRACT

The study carried out in the year 2023 aimed to assess the extent of academic under achievement among lower primary school students. A cross-sectional study has been undertaken in both government and aided lower primary schools in the district, Ernakulam in Kerala. The students who exhibited poor scholastic performance were identified with the assistance of teachers and by reviewing annual school reports. IQ level of the identified scholastically backward students was measured using the Seguin Form Board Test, a standardized intelligence test. Results showed that out of 1084 lower primary students studied, 166 (15.31%) students were scholastically backward, with 82 (16.84%) from the government schools and 84 (14.07%) from the aided schools. Most of the students had an IQ in the borderline range (70 – 79). The majority of scholastically backward students were boys and the highest number was in the age group 9-10, followed by the 8-9 and 7-8 years groups. Classes III and IV had the highest number of backward students. A significant majority 78 (46.99%) were from rural areas. There is a significant association between the area of residence and the type of school attended by scholastically backward students.

Keywords: Intelligence Quotient (IQ), Lower Primary School Students, Scholastic Backwardness

INTRODUCTION

In modern society, children are highly competitive in their scholastic as well as non-scholastic activities. Scholastic skills determine the ability of school children to read, write, spell, and perform arithmetic computations. Scholastic backwardness occurs when a child's school performance falls below expected standards. A child with scholastic backwardness may face the challenges such as; failure in one or more subjects, failure in

one or more classes, will be in lower 10th percentile marks in his/her class or identified by parent or teacher to be difficult to teach. A child with general scholastic backwardness struggles with all subjects in the school curriculum. In contrast, a child with specific scholastic backwardness lags behind in only one or two subjects, while their performance in other subjects may be satisfactory or even exceptional (Mangal, 2015).

Scholastic backwardness is often associated with cognitive inferiority, faulty academic behaviour, poor attention, lack of interest in studies, exam failure, emotional imbalance, aggression, and physical and psychological complaints and may have lasting effects on a child's life. Slow learners have below-average cognitive abilities with IQ ranging from 70 to 89. They struggle to cope with the traditional academic demands of a regular classroom. Around 8 percent to 9 per cent of primary school children score below average on standard IQ tests (Pal and Kumar, 2022).

Various studies estimated that 20 per cent to 50 per cent of school-going children experience scholastic backwardness. A study conducted in Alappuzha District, Kerala showed that 23.7 per cent of upper primary students had scholastic backwardness (Jayaprakash and Rajamohanam, 2022). A cross-sectional study conducted in Kerala discovered that children aged 13 to 16 years were the majority (61.4%) who had scholastic backwardness (Ramadas and Vijayan, 2019). The overall prevalence rate of academically backward children among 7th, 8th, and 9th grade students in rural schools was found as 49 per cent. However, this rate varied widely, ranging from 31 percent in one school to 75 per cent in another (Thakur and Agrawal, 2016). A study on 'scholastic backwardness in children attending normal schools' found that intelligence is not the sole determinant of academic performance. Various cognitive and non-cognitive factors, both within the child and in their environment—such as family, school, and society—are responsible for shaping the students' scholastic performance (Santhosh, 2014).

The study focused on determining the rate of academic under achievement among students in lower primary classes in Ernakulam

District of Kerala State. The study area, Ernakulam District in Kerala, represents a diverse demographic and educational landscape, with both urban and rural regions and a mix of government and aided schools. Kerala is recognized for its remarkable literacy levels and emphasis on educational development, yet disparities in academic performance remain, particularly among students in lower primary classes. The study aimed to determine the overall percentage of scholastically backward students in lower primary government and aided schools, to categorize the scholastically backward students based on their IQ levels, to identify any disparities in the gender and geographic distribution of scholastically backward students and to analyse the distribution of scholastically backward students across different age groups and school grades.

MATERIAL AND METHODS

The study was conducted in the year 2023 among the students from the selected 10 lower primary government and aided schools, in Ernakulam, Kerala. The total students population comprised of 1084, with 487 from government schools and 597 from aided schools. Among these students, 612 were boys and 472 were girls. Students from Class I to Class IV were included in the study. Purposive sampling technique was employed. Scholastic backwardness was identified if a child consistently performed poorly and regularly failed in all subjects or one or more subjects. Teachers and annual school reports served as sources of information. Based on these criteria, scholastically backward students were identified as sample for the study, from government and aided schools. Children with any physical disability or psychological disorder were excluded from the study. Consent was sought and received from the General Education Department, the heads of the institutions, the teachers, and the parents.

The IQ level of the sample was assessed using the Seguin Form Board Test (1856), a standardized intelligence test under the guidance of a clinical psychologist. The Seguin Form Board Test (1856) is a performance-based intelligence assessment that evaluates shape recognition, visual perception, eye-hand coordination, and cognitive skills using nonverbal methods. It also measures visuomotor coordination, spatial organization, motor dexterity, and the speed and precision of their performance. (Venkatesan, 2014). Three consecutive trials were administered to each sample. The mental age was determined using a standard chart by identifying the fastest time among the three trials, which was then used to calculate the intelligence quotient (IQ). The classification of IQ levels in this study was based on the Wechsler Intelligence Scale for Children—Fourth Edition (WISC-IV). The gathered data was subjected to statistical analysis and interpreted using percentage analysis and the Chi-square test.

RESULTS AND DISCUSSION

Results from Table 1 revealed that 16.84 per cent of the students were scholastically backward in government schools followed by aided schools (14.07 %). With respect to IQ level, 56.10 per cent were in the 'borderline' category followed by 'low average' category (29.27%) and 'extremely low' category (14.63%) in government schools. In aided schools, 64.29 per cent were in the 'borderline' category followed by 'low average' category (26.19%), and 'extremely low' category (9.52%).

The results were in line with the study by Beniwal *et al.* (2018) who stated that 11.46 per cent of children within the 5–15 years age rangewere having Scholastic Backwardness and Sharma *et al.* (2018) reported that 11.33 per cent of scholastic backwardness was found out among urban lower middle-class school children. According to Ramadas and Vijayan (2019) varying degrees of intellectual impairment was the main cause of scholastic

Table 1. Distribution of Scholastic Backward Students by School Types (n=1084) and IQ values (n=166)

Sl.No.	Particulars	Government n = 487	Aided n = 597	Total n = 1084
1	Scholastically backward students	82 (16.84)	84 (14.07)	166 (15.31)
2	*IQ Level	Government n = 82	Aided n = 84	Total n = 166
	Low average (80 – 89)	24 (29.27)	22 (26.19)	46 (27.71)
	Borderline (70 – 79)	46 (56.10)	54 (64.29)	100 (60.24)
	Extremely low (69 and below)	12 (14.63)	8 (9.52)	20 (12.05)

*Value in parentheses are percentages

Source: *IQ classification based on Wechsler Intelligence Scale for Children (WISC-IV)

backwardness. Haneesh *et al.* (2013) reported that 36 per cent of scholastically backward students had borderline intelligence in their study conducted among children in the 6-12 year age group attending regular schools.

The findings from the study indicate a notable disparity in scholastic performance between government and aided schools, with varying levels of intellectual impairment significantly contributing to scholastic backwardness, particularly among students in the 'borderline' IQ category who face greater challenges in meeting academic demands.

Table 2 revealed that 69.28 per cent of the scholastically backward students were boys followed by girls (30.72%) per cent. Among boys 70.73 per cent were in government schools and followed by in aided schools (67.86%). 29.27 per cent of the girls were in government schools followed by aided schools (67.86%). This indicates a relatively consistent gender distribution of scholastically backward students across government and aided schools, with boys being more prominently represented in both.

The findings were consistent with a similar study conducted among 12-16 year-old children by Nayak *et al.* (2017), that a significant portion of academic underachievers were boys, comprising 36.63 per cent. Another research study undertaken by Gohiya and Shrivastav (2015), revealed that among 57 academic backward school children, 77.19 per cent were male 23.36 per cent were female. Raghavendra and Reddy (2020) found that there was a marked majority of males (76.9%) compared to females (23.1%) in a study conducted on 'Etiology and risk factors for scholastic backwardness in children. Jayaprakash and Rajamohanam (2022) stated that there was a male domination (66.67%) in scholastic backwardness in their study. The predominance of boys among scholastically backward students observed in this study could be explained by their higher representation within the overall study population. This demographic imbalance suggests that the greater number of boys enrolled in the schools studied may have influenced the gender

Table 2. Distribution of Scholastic Backward Students by Gender, Age and School Grades (n=166)

Sl.No.	Variable	Category	Government n = 82	Aided n = 84	Total n = 166
1	Gender	Boys	58 (70.73)	57 (67.86)	115 (69.28)
		Girls	24 (29.27)	27 (32.14)	51 (30.72)
2	Age(years)	6 – 7	18 (21.95)	11 (13.10)	29 (17.47)
		7 – 8	20 (24.39)	22 (26.19)	42 (25.30)
		8 – 9	20 (24.39)	24 (28.57)	44 (26.51)
		9 – 10	24 (29.27)	27 (32.14)	51 (30.72)
3	School grades	Class I	19 (23.17)	12 (14.29)	31 (18.67)
		Class II	19 (23.17)	22 (26.19)	41 (24.70)
		Class III	24 (29.27)	25 (29.76)	49 (29.52)
		Class IV	20 (24.39)	25 (29.76)	45 (27.11)

*Value in parentheses are percentages

distribution of scholastically backward students.

With respect to the age distribution, 30.72 per cent of the scholastic backward students were in the age group of 9-10 years, succeeded by those in 8-9 years age group (26.51%), 7-8 years (25.30%) and 6-7 years (17.47%). In government schools, 29.27 per cent of the scholastic backward students were in the age group of 9-10 years, succeeded by those in 8-9 years age group (24.39%), 7-8 years (24.39%) and 6-7 years (21.95%). In aided schools, 32.14 per cent of the scholastic backward students were in the age group of 9-10 years, succeeded by those in 8-9 years age group (28.57%), 7-8 years (26.19%) and 6-7 years (13.10%). The age distribution reveals that the percentage of scholastically backward students remains relatively steady as children get older, though there is a slight increase in the older age groups. This indicates that as students advance in their education, they encounter increasingly complex academic challenges. These challenges can make it more difficult for students with learning difficulties to keep pace, thereby making their scholastic backwardness more apparent. As the curriculum becomes more advanced and demanding, students facing academic difficulties are more likely to fall behind, highlighting their difficulties in a more noticeable way. Consequently, the educational

gap between these students and their peers becomes more noticeable with age.

With respect to school grades, 29.52 per cent of the scholastic backward students are in Class III followed by Class IV (27.11%), Class II (24.70%) and Class I (18.67%). In government schools, 29.27 per cent of the scholastic backward students belonged to Class III followed by Class IV (24.39%), Class II (23.17%) and Class I (23.17%). In aided schools, 29.76 per cent of the scholastic backward students belonged to Class III and Class IV each, followed by Class II (26.19%) and Class I (14.29%). The results indicate a higher concentration of scholastic backward students in Class III and Class IV, with a relatively balanced distribution between government and aided schools. The higher concentration of scholastically backward students in Class III and Class IV can be attributed to several factors related to the increasing academic demands and cumulative learning gaps as students progress through these grades. In early primary grades, students typically focus on foundational skills like basic reading, writing, and arithmetic. However, as they enter Class III and Class IV, the curriculum shifts towards more complex concepts, including problem-solving, critical thinking, and the application of foundational skills in more advanced subjects.

Table 3. Distribution of Scholastic Backward Students by Area of Residence

Sl.No.	Area	Government n = 82	Aided n = 84	Total n = 166	Chi-square value	p-value
1	Urban	16 (19.51)	31 (36.91)	47 (28.31)	9.5281	0.008531*
2	Semi Urban	18 (21.95)	23 (27.38)	41 (24.70)		
3	Rural	48 (58.54)	30 (35.71)	78 (46.99)		

*Value in parentheses are percentages

*The result is significant at $p < .05$.

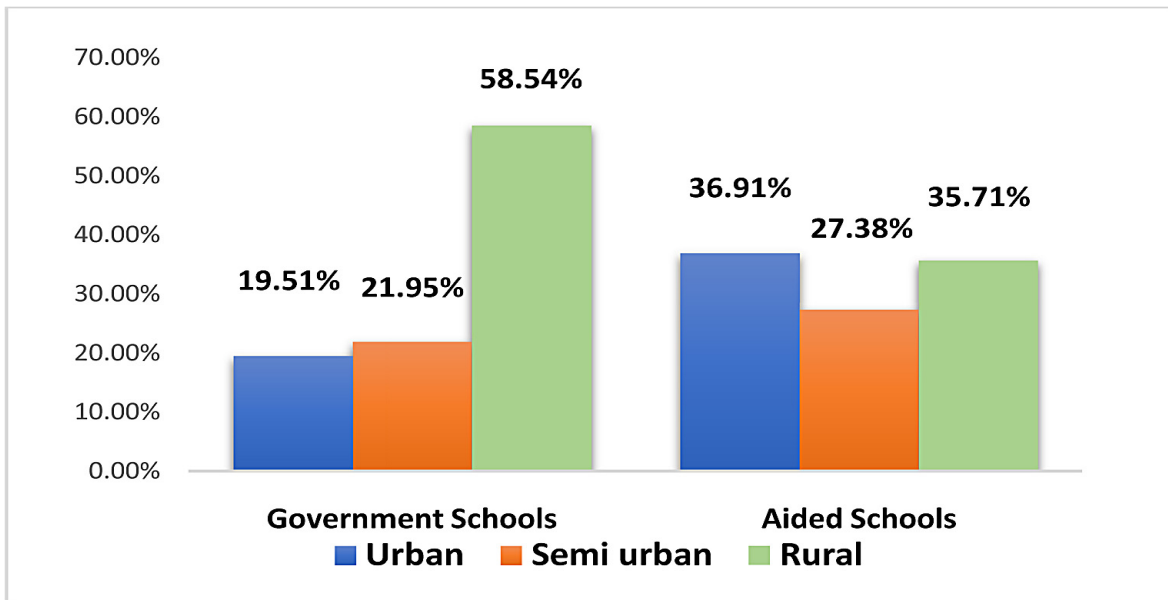


Fig. 1. Distribution of Scholastic Backward Students by Area of Residence

Results from Table 3 and Figure 1 revealed that 46.99 per cent of the scholastic backward students were from rural areas followed by students from urban areas (28.31%) and semi-urban areas (24.70%). In government schools, 58.54 per cent of the scholastic backward students were from rural areas followed by students from semi-urban areas (21.95%) and urban areas (19.51%). In aided schools, 36.91 per cent of the scholastic backward students were from rural areas followed by students from urban areas (36.91%) and semi-urban areas (27.38%).

It is evident from the data that rural areas had the highest proportion of scholastic backward students, with a notable predominance in government schools, whereas urban and semi-urban areas had a more balanced distribution between government and aided schools. The results align with Ramadas and Vijayan's (2019) study, which found that most of the scholastically backward children in their sample were from rural background (81.6%).

The chi-square results indicated that there is a statistically significant difference in the distribution of scholastically backward

students by area of residence between government and aided schools. The area of residence is significantly associated with the type of school attended by scholastically backward students. In rural areas, government schools often serve as the primary educational institutions, particularly in areas with lower socioeconomic status. These schools may face challenges such as limited resources, inadequate infrastructure, and fewer trained teachers, which can hinder the academic progress of students. Additionally, there may be less access to supplementary educational support like private tutoring, study materials, and extra curricular activities in rural areas. As a result, students in rural government schools tend to exhibit higher levels of scholastic backwardness.

CONCLUSIONS

The study reveals that 15.31% of students are scholastically backward, with higher proportions in government schools. Most (60.24%) belong to the borderline IQ category, indicating learning challenges. Boys constituted a significant majority (69.28%), highlighting gender disparity. The 9-10 age group has the highest concentration (30.72%),

with Classes III and IV showing the largest grade-wise distribution. Rural areas showed the highest proportion of scholastic backward students (46.99%), with a notable predominance in government schools, highlighting a significant urban-rural divide. These findings highlight the necessity for targeted interventions, including teacher training, resource access, early identification, and parental involvement, to enhance learning outcomes for scholastically backward students.

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