

Relationship Between Academic Achievement And Scholastic Aptitude Of Coastal School Students In Kerala

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Abstract

The main purpose of the study was to find out the relationship between academic achievement and scholastic aptitude of Coastal School Students in Kerala. It was found that scholastic aptitude has a significant influence in enhancing the achievement of coastal school students in Kerala. In terms of scholastic aptitude, it was also found that majority of the coastal school students have only average scholastic aptitude.

Key Words: Academic Achievement, Scholastic Aptitude, Coastal School Students in Kerala

Introduction

Education has been an institution operated for very limited and inherently conservative ends. To the extent that it performed a homogenizing function, it did so for the new entrants to tiny elite. Scholastic aptitude and academic achievement play a major role in the instructional strategy. It is the pivot through which the whole academic system rotates. The higher the aptitude towards one's interest the higher will be the achievement. Scholastic aptitude is the propeller which leads one to the final destination.

Academic Achievement means our learning attainment, accomplishments and proficiencies. It is the criterion for selection, promotion or recognition in various areas of life. Good (1959) states, academic achievement is the knowledge obtained or skill developed in academic subjects usually defined by test scores or marks assigned by the teacher. Achievement is the product of all the educational endeavors. The modern world needs the people with strong personality and academic achievement. The present education system is demanding the maximum potentiality of the individual. It will help to analyse the child's capabilities and potentialities.

Academic Achievement helps the teacher to assess the capabilities of the child. The parents will get awareness about their children with their achievement. The need for the achievement is psychological state of an individual in which he tries for the success in a competition with some standard of excellence, he is busy in some unique accomplishment or he is involved in attaining a long term achievement goal being success in life.

Achievement in education implies one's knowledge, understanding and skills in a specified subject. Academic achievement is the major concern of educational policy makers of every country. The focus is on the evolution of the past without reference to the future, except for the implicit assumption that acquired skills and knowledge will be useful in their own right in the future. It is the performance in the outcome of education the extent to which a student,

teacher or institution has achieved their educational goals. Academic Achievement is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important. It refers to the level of schooling one has successfully completed and the ability to attain success in studies.

Hawes and Hawes(1982) defined achievement as successful accomplishments or performance in particular subject or courses, usually by reasons of skills, hard work or interest ,typically summarized in various types of grades, marks or scores. Academic achievement is important to determine the future of the students. However, Steinberger (1993) explains the encompasses the children's ability and performance; it is multi-dimensional, I is intricately related to human growth and cognitive, emotional, social and physical development; it reflects the whole child; it is not related to a single instance, but occurs time and levels, through a student's life in public school and on to post secondary years.

Objectives of the Study

- To assess the scholastic aptitude of coastal school students in Kerala
- To find out the relationship between the academic achievement and scholastic aptitude of coastal school students in Kerala

Method Adopted for the Study

Normative Survey Method was adopted for the present investigation.

Sample Selected

A representative group of 410 Coastal school Students from different Districts of Kerala were selected for the study. The total sample was randomly selected from different districts namely, Thiruvananthapuram (97), Alappuzha (185) and Kannur (128).

Tool Used

- Scholastic Aptitude Test

Statistical Techniques Used

The statistical techniques adopted for the study consist of Calculation of Mean, Standard Deviation, ANOVA and Scheffe' Test.

Analysis and Interpretation of Data

Analysis of scholastic aptitude of coastal school students in Kerala

For the analysis 410 coastal school students belonging to three different districts of Kerala namely Thiruvananthapuram, Alappuzha and Kannur were taken as the sample. A scholastic aptitude test was administered for the present investigation. Achievement scores of these 410 coastal school students were collected from the school records. The present study is mainly intended to analyse the relationship between academic achievement and scholastic aptitude of coastal school students. Total marks for the scholastic aptitude test is 87.

In order to find out the extent of scholastic aptitude of coastal school students in Kerala, the students were classified into three groups, namely, high, average and low. For this purpose the Mean (M) and Standard Deviation (σ) were calculated. Those getting scores above ($M+\sigma$) were taken as students having high scholastic aptitude, those getting score below ($M-\sigma$) were taken as students low scholastic aptitude and those in between were considered as those

having average scholastic aptitude. The scores obtained in the scholastic aptitude test were scored and the extent of scholastic aptitude was analysed.

Table 1

Scholastic Aptitude of coastal school students of Kerala

Scholastic Aptitude		
Mean	203.87	
Standard Deviation	17.64	
High	43	10.49%
Average	319	77.80%
Low	48	11.71%
	410	100.00%

From the Table 1 it can be seen that the Mean score of the scholastic aptitude of coastal school students in Kerala is 203.87 and Standard Deviation is 17.64. And 43 (10.49%) students out of 410 have high scholastic aptitude, 48 (11.71%) having low scholastic aptitude and 319 (77.80%) having average scholastic aptitude. Majority of the students i.e. 319 coastal school students have average scholastic aptitude.

Analysis of the relationship between the academic achievement and scholastic aptitude of coastal school students in Kerala

The achievement scores of coastal school students in the high, average and low scholastic aptitude groups were compared in order to find out whether there is any significant difference between these groups in their achievement. The details are given in the Table 2.

Table 2

The Mean and Standard Deviation for the Achievement Scores of Students belonging to High, Average and Low Scholastic Aptitude

Scholastic Aptitude	N	Mean	Standard Deviation
High	43	268.98	116.37
Average	319	216.33	96.59
Low	48	171.10	112.98

Table 2 shows the mean and standard deviation of achievement scores of coastal students belonging to high, average and low scholastic aptitude. The table reveals that the mean achievement scores of students belonging to high scholastic aptitude is high and the mean achievement scores of students belonging to low scholastic aptitude is low. But it does not reveal whether there is any statistically significant difference in the achievement scores of the three groups (groups belonging to high, average and low scholastic aptitude). In order to

find out whether the difference is significant, the mean scores obtained by these groups were compared using the technique of Analysis of Variance (ANOVA) and the obtained F-value was tested for significance. The results of the analysis are given below.

Table 3

Summary of ANOVA of the Mean Achievement Scores of Coastal School Students belonging to High, Average and Low Scholastic Aptitude

Source of Variation	Sum of squares	df	Mean square	F-value
Between groups	217339.315	2	108669.657	10.70**
Within Groups	4135627.895	407	10161.248	
Total	4352967.210	409		

****Significant at 0.01 level**

Table value of F

$F(2, 407)$ at 0.05 Level = 3.02

$F(2, 556)$ at 0.01 level = 4.66

Table 3 reveals that there is significant difference in the achievement scores of students belonging to high, average and low scholastic aptitude as the obtained F-value is significant ($F = 10.70$; $p < 0.01$). It means that achievement of coastal school students belonging to high, average and low scholastic aptitude is not identical.

The ANOVA table shows that the achievement scores of the students belonging to three different groups (high, average and low scholastic aptitude) are not similar. However, the result does not help to identify exactly the pairs of groups which differ significantly. In order to overcome this, it was decided to apply Scheffé Test of Post hoc comparison.

The Scheffé test is closely linked with ANOVA and requires only the F table in performing computations. The result of the analysis done in this regard is given in the Table 4.

Table 4

Comparison of Achievement Scores of Coastal School Students belonging to High, Average and Low Scholastic Aptitude: Results of Scheffé Test

Groups compared	Mean difference (I-J)	95% confidence interval		Level of Significance
		Lower bound	Upper bound	
Between high and average scholastic aptitude	52.65**	12.42	92.88	0.006
Between high and low scholastic aptitude	97.87**	45.87	149.87	0.000
Between average and low scholastic aptitude	45.22*	6.88	83.57	0.016

***Significant at 0.05 level**

****Significant at 0.01 level**

For comparing the achievement scores of coastal school students belonging to high and low scholastic aptitude, the mean difference between these groups was computed. The obtained mean difference is significant (mean difference = 52.65; $p < 0.05$). This shows that

there is significant difference between students belonging to high scholastic aptitude and low scholastic aptitude in their achievement.

Similarly, the achievement scores of students belonging to high scholastic aptitude and low scholastic aptitude were also compared. The obtained mean difference revealed that there is significant difference in the achievement scores of students belonging to high scholastic aptitude and low scholastic aptitude (mean difference = 97.87; $p < 0.01$).

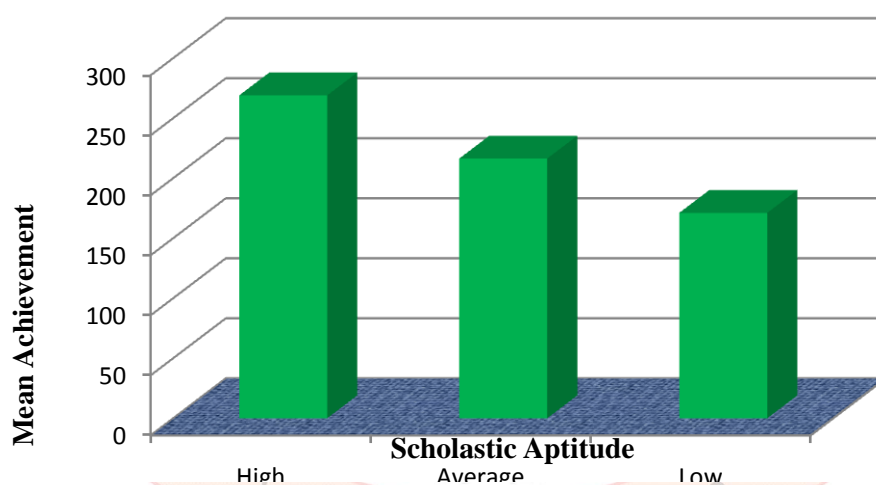
When the achievement scores of coastal school students belonging to average scholastic aptitude and low scholastic aptitude were compared, significant difference was observed between these groups in their achievement (mean difference = 45.22; $p < 0.05$). This reveals that students belonging to students belonging to high and low scholastic aptitude groups also differ significantly in their achievement scores. .

This shows that all the three pairs compared differ significantly in their achievement. The obtained mean values shows that students belonging to high scholastic aptitude group have achievement (mean = 268.98) followed by students belonging to average scholastic aptitude group (mean = 216.33) and students belonging to low scholastic aptitude group. This shows that scholastic aptitude has a significant influence in enhancing the achievement of coastal school students in Kerala.

The mean achievement scores of students based on their scholastic aptitude is given in Fig. 1.

Figure 1

Mean Achievement Scores of Coastal School Students based on Scholastic Aptitude



Major Findings

1. The mean score of the scholastic aptitude of coastal school students in Kerala is 203.87 and standard deviation is 17.64 and 43(10.49%) students out of 410 have high scholastic aptitude, 48(11.71%) having low scholastic aptitude.
2. It was analyzed from the present investigation that 319(77.80%) having average scholastic aptitude and majority of the coastal school students have average scholastic aptitude.
3. The mean score of students belonging to high scholastic aptitude is very high and the mean achievement scores of students belonging to Scholastic aptitude is very low.
4. The achievement scores of the students belonging to three different groups (high, average, and low scholastic aptitude) is not similar.

5. There exists significant difference between students belonging to high scholastic aptitude and low scholastic aptitude in their achievement.

Conclusion

The nature and extent of educational backwardness of children in coastal areas will be a challenging problem for educators and administrators, parents and pupils themselves. Illiterate parents of the coastal school students are unaware of the potentialities hidden in their children. This unawareness of parents and administrators adds to the low motivation in children and leads gradually to under-achievement. It is in this context, the investigator made a humble attempt to explore the reasons for underachievement among the coastal children. Cardinal importance to be given on the scholastic aptitude of coastal school children. It will enhance the academic achievement of them. This investigation reveals that there is significant relationship between scholastic aptitude and achievement of the coastal school children.

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