Abstract

This study focused on various affecting factors on the students' achievement at the secondary level in the rural, remote schools especially in the subject's mathematics and science. The sample selected for the study comprised a total of 100 students who were studying 9th standard in two rural, remote schools in Virudhunagar district. This study aims at the factors which are the routine causes for the students' academic achievement focusing on their heredity, family socio-economic status, cooperation from their counterparts, parent's educational status and gender differences. The results of the study revealed that socio-economic status (SES) and parents' education have a significant effect on students' overall academic achievement as well as achievement in the subjects of Mathematics and Science. The high and average socio-economic level affects the performance more than the lower level. It is very interesting that parents' education means more than their occupation in relation to their children's academic achievements at school. It was found that female students perform better than the male students.

I. INTRODUCTION

Education is a growing academic discipline. Nowadays it is proclaimed correctly that every birth cries for education. In this era of globalization and technological revolution, education is considered as a first step for every human activity. It plays a vital role in the development of human capital and is linked with an individual's well being and opportunities for better
living (Battle & Lewis, 2002). It ensures the acquisition of knowledge and skills that enable individuals to increase their productivity and improve their quality of life. This increase in productivity also leads towards new sources of earning which enhances the economic growth of a country (Saxton, 2000). The students’ academic achievement is given the topmost priority by the educators. It is meant for making a difference locally, regionally, nationally and globally. Educators, trainers, and researchers have long been interested in exploring variables contributing effectively for quality of performance of the learners. These variables are inside and outside school which play the vital role in students’ academic achievement. These factors may be termed as student factors, family factors, school factors and peer factors (Crosnoe, Johnson & Elder, 2004). Generally these factors include age, gender, home environment, social atmosphere, socioeconomic status (SES), parents’ educational status, parental profession, language, income etc; in a broader context demography is referred to as a way to explore the nature and effects of demographic variables in the biological and social context. Unfortunately, defining and measuring the quality of education is not a simple issue and the complexity of this process increases due to the changing values of quality attributes associated with the different stakeholders’ view point (Blevins, 2009; Parri, 2006). Besides other factors, socioeconomic status is one of the most affected factors among educational professionals that contribute towards the academic performance of students. The most prevalent argument is that the socioeconomic status of learners affects the quality of their academic performance. Most of the experts argue that the low socioeconomic status has negative effect on the academic performance of students because the basic needs of students remain unfulfilled and hence they do not perform better academically (Adams, 1996). The low socioeconomic status causes environmental deficiencies which results in low self esteem of students (US Department of Education, 2003). More specifically, this study aims to identify and analyze factors that affect the quality of students’ academic performance.

II. OBJECTIVES OF THE STUDY

i.) Analyzing the effect of socio-economic status, parental education and occupation on students’ academic performance.

ii.) Exploring the effect of socio-economic status on student’s achievements in the subjects of Mathematics and Science.

iii.) To find the difference among the students’ achievement in relation to their gender differences.

III. HYPOTHESES

i.) There is no significant difference of socio-economic status, parental education and occupation on students’ academic performance.

ii.) There is no significant difference of socio-economic status on student’s achievements in the subjects of Mathematics and Science.

iii.) There is no significant difference among the students’ achievement in relation to their gender.
IV. RESEARCH METHODOLOGY
This study was conducted using descriptive survey method. The population was the secondary school male and female students from two rural, remote schools in Virudhunagar district. Only fifty volunteer students (25 male and 25 female) out of all volunteers from one section of the 9th std were selected randomly from each of the 2 schools. Thus the sample size for the study was 100 students (50 male and 50 female). The study was delimited to only demographic factors such as students’ gender, parents’ education, parents’ occupation and socio economic status. The quality of academic performance was measured by their achievement scores of the 8th std annual examination verified from the school records. Data regarding the variables such as parents’ education, parents’ occupation, Socio-economic status and students’ gender were collected by using a questionnaire.

V. STATISTICAL ANALYSIS AND INTERPRETATION
The collected data were analyzed by applying descriptive and inferential statistical measure. A t-test was used to compare the achievements of male and female students. The significant effect of different factors on students’ achievement was explored through multiple comparisons by applying ANOVA using SPSS 16.

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES &amp; Marks in 8\text{th} std</td>
<td>110977.4</td>
<td>2</td>
<td>55488.70</td>
<td>15.270</td>
<td>.000*</td>
</tr>
<tr>
<td>SES &amp; Marks in Mathematics</td>
<td>7254.485</td>
<td>2</td>
<td>3627.243</td>
<td>9.086</td>
<td>.000*</td>
</tr>
<tr>
<td>SES &amp; Marks in science</td>
<td>9154.629</td>
<td>2</td>
<td>4577.314</td>
<td>14.896</td>
<td>.000*</td>
</tr>
<tr>
<td>Father’s education &amp; Marks in 8\text{th} std</td>
<td>191918.8</td>
<td>7</td>
<td>27416.97</td>
<td>7.576</td>
<td>.000*</td>
</tr>
<tr>
<td>Mother’s education &amp; Marks in 8\text{th} std</td>
<td>191049.05</td>
<td>7</td>
<td>27292.72</td>
<td>7.831</td>
<td>.000*</td>
</tr>
<tr>
<td>Father’s occupation &amp; Marks in 8\text{th} std</td>
<td>23541.57</td>
<td>3</td>
<td>7847.190</td>
<td>2.072</td>
<td>.103</td>
</tr>
<tr>
<td>Mother’s occupation &amp; Marks in 8\text{th} std</td>
<td>9088.016</td>
<td>3</td>
<td>3029.339</td>
<td>0.795</td>
<td>.497</td>
</tr>
</tbody>
</table>

This Table shows that socio-economic status (SES), fathers’ education, and mothers’ education, had a significant effect on students’ overall academic achievement as well as on Mathematics and science scores in 8\text{th} standard at the .05 level of significance. Further it is
obvious that parental occupation had no significant effect on academic achievement. Hence the hypotheses that there are no significant effects of SES level and parental education level on students’ academic achievement have been rejected. Also the hypothesis that there is no significant effect in achievement on the basis of parental occupation was accepted. It is therefore concluded that SES level and parental education affect the achievement of their children, but the parents’ occupation had no effect on SES levels (Low, Average & High) on students’ achievement scores in the subjects of Mathematics, science & Cumulative achievement indicated that students belonging to high SES level overall perform better in the subjects of Mathematics and English as well as show better performance in cumulative achievement scores. Average and high SES levels have more effect than low SES level in all types of achievement quality. The null hypothesis that there is no significant difference in academic performance of students due to their socio-economic status is therefore rejected. The students with high and average SES exhibit better quality of performance than the students with low level of SES. The multiple comparisons show that fathers with Bachelor degree and Master degree education have more affects on students’ achievement than any other level of education (e.g., illiterate, secondary, intermediary).

It is evident also that mothers with Secondary, Intermediary, and Bachelor degree-education levels have significant effects on the achievement of their children as compared to other education levels.

It is also found that there is a significant difference in the marks of male and female students. The null hypothesis that there is no significant difference in the quality of academic performance of students in relation to their gender is therefore rejected. It is concluded from the results that female students perform better than the male in the subjects of Mathematics and Science as well as in the overall achievement scores.

VI. RECOMMENDATIONS

i.) There are various factors in and out of the school premises those affect the quality of academic performance of students. This study only focused on some of the factors outside school that influence the student’s achievement scores. The main aspect for the educators is to educate their students effectively so that they may be able to show quality performance in their academics. To achieve this objective it is of vital importance for the educators to understand better about the factors that may contribute in the academic success of students.

ii.) Further research is needed to explore the problem on a large sample from more scattered rural/ urban schools including other student factors, family factors, school factors and peer factors.

VII. CONCLUSION

This study concluded that the higher level of Socio-economic Status is the best indicator contributing towards the quality of students’ achievement. Family characteristics like socio economic status (SES) are significant predictors for students’ performance at school besides the other school factors, family, environment, gender differences and counter parts. Higher
SES levels lead to higher performance of students in studies, and vice versa (Hanes, 2008). Parental education also has effects on students’ academic performance. Parental occupation has little effect on their child’s performance in studies than their education. Student’s gender strongly affects their academic performance, with girls performing better in the subjects of Mathematics, and Science as well as cumulatively. Girls usually show more efforts leading towards better grades at school (Ceballo, McLoyd & Toyokawa, 2004). It is very important to have comprehensible understanding of the factors that benefit and hinder the academic progress of an individual’s education. To determine all the influencing factors in a single attempt is a complex and difficult task. It requires a lot of resources and time for an educator to identify all these factors first and then plan the classroom activities and strategies of teaching and learning. It also requires proper training, organizational planning and skills to conduct such studies for determining the contributing factors inside and outside school. This process of identification of variables must be given full attention and priority so that the teachers may be able to develop instructional strategies for making sure that all the children be provided with the opportunities to arrive at their fullest potential in learning and performance.

VIII. REFERENCES


TO CITE THIS PAPER