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# Relationship between Some Selected Variables of Socio-Economic Status and Educational Aspiration in Junior Secondary Students in Type II School in the Batticaloa Zone, Sri Lanka

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*Abstract:*
*This study was carried out to find the relationship between some selected variables of socio-economic status and educational aspiration in junior secondary students. A sample survey design was adopted for this study. The study was directed at the population of junior secondary students in the Batticaloa zone of Eastern Province in Sri Lanka. The sample was 300 students who were studied in grades6 to 9 and offering science and mathematics subjects. The selected 10type II schools from this research area. The schools were stratified into urban and semi-urban schools. The 30 students were systematic random sampling selected with male and female among the grade junior secondary grades and to make a total of 300 respondents from 10 schools that constituted the sample for this study. The schools consist of 4 semi- urban and 6 urban schools was selected for this study.*

*The students' questionnaire, consists of section A which is made up of 18 questions, measuring the attitude of the students while the section B contain 12 questions for measuring the selected three variables of socio-economic status (FO, PE, FI) (home influences) items. They were Likert scale item type questions, in which respondents choose from 5-point scores such as strongly, agree to strongly disagree. Thirdly, information concerning the individual performance of students was obtained from their continuous assessment records of the school subjects concerned (Mathematics and Science). The null hypotheses were postulated and tested at 0.05 level of significance to the impact of parental involvement on student's attitude and their performance in science and mathematics subject. Data collected on the study were analysed using inferential statistics which includes; student analysis of t test and Pearson product Moment correlation coefficient.*

*The Inter-Correlation test done to check the relationship between Fathers' Occupation and the sub-variables of EA. From this, there is a significant relationship between FO and EA (0.001). The correlation between the above two variables is 0.194, meanwhile the value of non-determination factors (residual) is 96.2% ($R^2$ = 0.038). Inter-Correlation test done to check the relationship between Parental Education and the sub-variables of EA. From this, there is a significant relationship between PE and EA (0.001). The correlation between the above two variables is 0.252, meanwhile the value of non-determination factors (residual) is 93.7% ($R^2$ = 0.063). Inter-Correlation test done to check the relationship between Family Income and the sub-variables of EA. From this, there is a significant relationship between FI and EA (0.001). The correlation between the above two variables is 0.215, meanwhile the value of non-determination factors (residual) is 95.4% ($R^2$ = 0.046). The phenomena observed were discussed in the light of prevailing conditions in most of the developing countries. Conclusively, home influence (FO, PE, and FI) can be a tool to enhance school learning.*

*Keywords: Father Occupation, parental education, family income, achievement motivation, self-concept, adolescent, parental involvement, junior secondary grade, Type II School*

## 1. Introduction

There are a number of researchers on achievement and the factors that are influencing the achievement of students. Achievement is influenced by many factors like values, intelligence, creativity, SES, the level of aspiration**,** etc., and the views of various researchers on different factors are cited here under. The quest to the cause of differential academic achievement to children is engaging the attention of sociologists. This has been prompted by accumulated research evidence that achievement is not based on distinctions of natural ability alone, but also on social and family background. Various arguments have been flung back and forth as to whether social and family background rather than innate ability is the driving force behind educational achievement.

With the development of sociology as an experimental science, sociologists have provided more and more complex evidence that makes our understanding of educational achievement clearer. Earlier work of sociologists was characterized by investigation in to ability, opportunity and social class (Epstein, 1995; Marsh, 2003). Later sociologists tended to concern themselves identifying the causal factors of achievement. Because of this concern, the influence of

structure of school system; peer groups, curriculum and socio-economic factor were questioned as probable determinants of achievement (Miller, 1991; Alexander and Campbell, 1994).

It is generally thought that socio economic status (SES) is related to how well a student does in the educational process. In this section, the relationship between SES and educational aspiration's (EAs) is noted by three sets of researchers. While controlling the effects of intelligence, Sewell, Haller and Straus (1987) studied the relationship between EAs of high school students with family SES. Their findings showed that the relationship was statistically significant. Specifically, 'high level EA or college plans are most characteristic of those from high status families' (Sewell, Haller and Straus, 1987).

## 2. Review of Literature

Weiner and Murray (1991) summarized findings of Weiner and Graves' (as cited in Weiner and Murray, 1993) study of a school system that was considered one of the nation's finest. Over half of the low SES students aspired for a college education compared to almost all of the students with a high SES. The trend continued with only one third of the lower SES students and all of the high SES students enrolled preparatory classes.

Sewell and Shah (1998) noted that 'an important and consistent finding in the area of stratification research is that the children of higher social-class origins are more likely to aspire to high educational and occupational goal than are the children of lower social class origins'. Regardless of the vast inconsistency in study samples and methodology, this finding was held as true (Sewell and Shah, 1988). A recent study by Wee Beng Neo, (1999) continued to reflect similar finding.

A family's SES is explained based on,

- Father's Occupation (FO)
- Parental Education (PE)
- Family Income (FI)

These are seven sub-variables which were mentioned in this study: Family income, parental education level, father's occupation and social status of the family in the community (such as contacts within the community, group associations and the community's perception about the family), (Anderson et al., 1992). Families with high SES often have more success in preparing their young children for school because they typically have access to a wide range of resources to promote and support young children's development. They are able to provide their young children with high-quality child care, books and toys to encourage children in various learning activities at home. Also, they have easy access to information regarding their children's health, as well as social, emotional and cognitive development. In addition, families with high SES often seek out information to help them better prepare their young children for school.

Astone and Mc Lanahan (1998) discuss the impact of SES on children's readiness for school; 'The segregating nature of social class, ethnicity and race may well reduce the variety of enriching experiences thought to be prerequisite for creating readiness to learn among children. Social class, ethnicity and race entail a set of 'contextual givens' that dictate neighborhood, housing and access to resources to that affect enrichment or deprivation as well as the acquisition of specific value systems.'

Educational aspiration in the study is a composite index consisting of 3 measures. Such as,

- Achievement motivation (AM)
- Self-concept (SC)
- Students' attitude to education (SAE)

The score to each of the three variables was converted to a stanine scale to normalize and standardize the scores. This was computed for the total sample and for each school separately. The sum of the scores was divided into equal groups, categorized as high, and low based on the percentage. The three aspiration levels were identified for the total sample for descriptive analysis and for each school separately for statistical analysis of data. A student's achievement motivation, his self-concept and his attitude to education and work have been found to be important in motivating a child to achieve academic success in different researches and hence selected as the ingredients that largely make up a student's educational aspiration.

### 1.1. Objective

How far correlates between some selected variable of Socio-economic status and Educational aspiration in secondary school in urban and Semi-urban area in the Batticaloa district.

### 1.2. Hypothesis

- $H_1$- There is no significant relationship between fathers' occupation and, Educational Aspiration (AM, SC, SAE).
- $H_2$- There is no significant relationship between Parental education and, Educational Aspiration (AM, SC, SAE).
- $H_3$- There is no significant relationship between Family income and, Educational Aspiration (AM, SC, SAE).

## 2. Methodology

Several considerations determined the choice of the sample. A survey of all the school in the Batticaloa district would have been ideal but unmanageable. It was therefore decided to limit the sample to 10 schools in the district. The sampling frame was designed to include three-way stratification as region (Batticaloa district), school (selected 10 schools) and class (grade 6 to 9). Schools were chosen to represent urban and semi-urban areas. Rural schools are not being included in the research, since the rural area schools do not have grades 6 to 9 and most of the schools are primary, most of them are type III schools, they do not have proper infrastructure facilities, and do not have positive teaching and

learning environment for the science subjects.  Instead of the rural schools, semi-urban area schools have been considered for the research.

A list of grades to 9 classes from the above schools was obtained along with the number of girls and boys in each class. A cluster (if school has any parallel classes) was chosen from each school according to random numbers from the schools where there were several grade 6 to 9 classes. Where there was only one grade 6 to 9 that class was included in the sample. Altogether 10 schools were chosen. The children in the sample amount to 300.

From the urban and semi-urban areas, out of the 10 schools' students in grade 6 to 9 students in junior secondary are studying (totally 4568).  Hence, out of 4568 students, 300 students were selected as samples.  Out of the 10 schools, all schools are type 2 schools. From the above 10 schools, 30 samples have been selected from each school which becomes a total of 300 samples.

*2.1. Socio Economic Status*

2.1.1. Father's Occupation

The most approved method of classification has been by the father's occupation. It could be recorded as reported by the child and is and adequate means of forming a judgment. One such is the Registrar Classification of occupation in Britain. It is made up of five groups. Such as,

- Professional and Managerial occupation
- Intermediate occupation
- Skilled occupation
- Partly skilled occupation
- Unskilled occupation

The other popular classification is the Hall and Johnes (1970) which is based on the way 1400 men and women throughout Britain rated the social status of others. Unlike the Registrar General's classification which has five categories this had seven categories. Such as,

- Professional and higher administration
- Managerial and Executive
- Non-manual higher supervisory
- Non-manual lower supervisory
- Skilled manual and some non-manual
- Semi-skilled manual
- Unskilled manual

| No | Class | Occupation | Scores |
|---|---|---|---|
| 1 | Class   I | Professional occupational stage (Judge, Doctor, Engineer-any field, Accountant, Scientist | 10 |
| 2 | Class   II | Managerial highly Executive jobs-Professional but not specialization (Director, Manager, Superintendent, Lawyer, and Head of the department) | 9 |
| 3 | Class   III | Skilled and Non skilled manual workers-Specialization in skilled work in any field. | 8,7 |
| 4 | Class   IV | Semi-skilled worker, Technical from any field | 6,5 |
| 5 | Class   V | Industrial workers, semi-skilled from local services. Agricultural workers. | 4,3 |
| 6 | Class   VI | Unskilled workers, domestic purposes for any field from local line. | 2 |
| 7 | Class   VII | Unskilled labors, Unemployed. | 1 |

*Table 1: Parental Occupational Prestige Scoring Scale Based on Nile's scale*

In Sri Lanka, there is no widely accepted scale for scoring of occupation. In this study, the father's occupation was scored on continuous scale ranging from 1–10, four occupational classes were identified based on the score, similar to Balapatabendi's (1969) classification namely upper middle class, lower middle class, and upper and lower working class. Class 1 or the upper middle class, includes fathers in professional and managerial occupation. Class 2 or the lower middle class, includes non-manual workers, such as teachers and clerks and skilled manual workers doing technical jobs. Class 3 or the upper and lower working class, consists of agricultural workers, semi-skilled laborers workers, while class 4 refers to unskilled workers and the unemployed. This is an adaptation of the division of social class employed by the Registrar-General of Britain in the government's decimal census of the population. Class 2 or lower middle class approximates to class 2 and 3 of the Registrar-General's scales; otherwise, the classes are roughly parallel.

But the occupational prestige scale used here is that developed by Niles (1981) especially for Sri Lanka. Niles' scale contains seven major occupational categories. The scale is found to have a high correlation (0.95) with the International Occupational Prestige Scale (IOPS) developed Wiseman (1971). Its major advantage lies in the fact that, the scale has taken into consideration the peculiarities of Sri Lankan society, e.g., the presence of unique occupations stated above and the indirect influence of the caste system on a person's occupational prestige. Niles' scale contains seven major categories from I to VII. Chandra Gunawardena (1980) also used her study (Socio-economic effectiveness of higher education in Sri Lanka) above occupational prestige scale.

## 2.1.2. Parental Education

In estimating parental education, both parents' educational attainment was taken into account. Each parent's educational level was assessed on a 6-point scale. Those with university or equivalent qualification scored 5 points. Any training after G.C.E (O/L) scored 4 points. Education up to G.C.E (O/L) was given a score of 3 points, and those whose education ranged between grade five and G.C.E (O/L) scored 2 points. Schooling between grades one to five was given 1 point while those no education scored 0.

Three educational levels among parents were identified based on the scores the parents had jointly gained, as given below (Table 2).

| No | Educational Levels | Scores |
|----|--------------------|--------|
| 1 | Level - I | 10,9,8 |
| 2 | Level - II | 7,6,5 |
| 3 | Level - III | 4,3,2,1 |

*Table 2:  Parental Educational Level Scoring Scale*

Level 1 parent would both have a minimum of G.C.E (O/L) while one of the parents would be a graduate or of equivalent professional qualification, or both parents would have some training after G.C.E (O/L). Level 2 included those parents who had both studied above standard five while one of them had higher G.C.E (O/L) or higher qualifications. Level 3 would indicate parents who were relatively uneducated, the highest learning among them being where one parents had some training beyond the G.C.E (O/L) while the other no schooling or elsewhere one parent had studied up to the G.C.E (O/L) while the other had studied till grade five.

## 2.1.3. Family Income

In scoring family income (Table 3)
- The earnings of parents and employed children and financial help from others.
- The member of children was taken into account.

Each section is scoring 5 points. The higher the income, the greater was the score, while the greater the number of children, the fewer were the points allotted. So the maximum scores are 10 (Table 3)

| No | Income | Levels | Scores |
|----|--------|--------|--------|
| 1 | Over Rs.40,000/= | I | 5 |
| 2 | Rs.30,000/= - Rs.40,000/= | II | 4 |
| 3 | Rs.20,000/= - Rs.29,999/= | III | 3 |
| 4 | Rs.10,000/= - Rs.19,999/= | IV | 2 |
| 5 | Less than  Rs.10,000/= | V | 1 |

*Table 3: Family Income Scoring Scale*

The number of children was considered in assessing income since it determines the expenditure in the home.

## *2.2. Educational Aspiration*

## 2.2.1. Achievement Motivation

This instrument of measurement was,
- The IEA achievement motivation scale. (Mc. Clelland and Atkinson, 1984). This scale had statements with which one had to agree or disagree. Agreement with a statement indicating strong aspiration and disagreement with opinions that were weak in achievement motivation were given one point each. Maximum scores are 9.
- Achievement motivation was also estimated from an assessment of aspirations and expectation regarding education and occupation (i) at present (ii) in four years' time. To judge educational aspirations and expectations, the criterion was the number of years of education after the G.C.E (O/L) aspired to and expected by the student. A period of five years or more scored 5 points, two to five years scored 3 points, two years of study was given 1 point and when no further education after the G.C.E (O/L) was indicated no point were given. A maximum of 10 points covered educational aspiration and expectation. Those who indicated that in four years' time they would be studying in a university scored 5 points, those who expected to be undergoing some form of training after G.C.E (O/L) scored 3 points, those was expected to be doing a job scored 1 point and no point were scored by those who expected to stay at home. Aspirations and expectations of what students expected to do in four years' time together scored 10 points, A score of 10 points was allocated to occupational aspiration. This was scored on the same scale as father's occupation in this study.

## 2.2.2. Self-Concept

Self-concept of ability was measured by Brookver and Thomas (1992) scale adapted to suit a Sri Lankan sample. It is a five-point Likert-type scale consisting of seven parts contained in question 5 of part 2 of the questionnaire. The first two part of question 5 evaluates the perception of self in relation to peers, the next 3 the self-perception of academic ability to cope with studies at the G.C.E (O/L), G.C.E (A/L) and at the University. Part 6 and 7 deal with self-evaluation of

one's school work and estimation of success at the G.C.E (A/L). Evaluations range from the most favorable to unfavorable. The scores ranged from 1 to 5 the move favorable self-evaluations scoring higher point.

### 2.2.3. Attitude to Education and Home work

The measurement of students' attitude to education was estimated on a scale prepared by Niles (1981) and also by the teacher's estimate of their attitude to home work. It has been generally found that the teacher's estimate is not entirely reliable since their judgment is influenced by students' performance, and therefore given less weight age   5 points out of the maximum of 15 point.

## 3. Construction of the Questionnaire

Instructions for filling the questionnaire were included at the first stage. There were two main sections in the questionnaire. Each one of them related broadly to variable and one of the hypotheses of the study. A total of 30 items were included in the final questionnaire. This was examined by some questionnaire specialist in the Eastern University. Their reactions to every phase of its organization were noted down and questions rephrased where necessary.

Since there were fairly satisfactory instruments in Tamil to measure SES (FO, PE, FI) and EA (AM, SC, SAE) the investigator had relatively few problems in the construction of the questionnaire. The SES measurement scale and the scale to measure aspiration were constructed by the investigator.

The investigator had to make that the question was adequate to elicit the necessary information sought and to accurately assess the area studied. Where additional question was necessary, they had to be included. It was also necessary that the questionnaire satisfied certain requirement. There should be adequate provision to assess the reliability of the information supplied by students, for which check questions that asked for example, the maker of a car or serial number of certain articles would be useful. Question would have to be so worded that children would know what exactly was asked for. Ambiguous and double-barreled questions have to be avoided and question should not 'prompt' the answers no compel students to an uneasy choice. It should be possible for answers to be easily scored and qualified. The measuring instruments selected seemed fairly satisfactory when judged by these standards. A few additional questions were included to estimate SES and EA.

The construction of final questionnaire contains two parts.

- Part I - Consists of 30 questions (06 questions are about science subject and other 24 questions are about 3 FO, PE, FI (SES) variables). This part will evaluate SES of the students – These parts of questionnaire based on first, second and third specific objectives.
- Part II - Consists of 25 questions (09 questions are to evaluated Achievement Motivation, 07 questions are to evaluate Self-concept and 10 questions for the Students' attitude to education, with science teacher response about the student's interesting of this subject). This part will evaluate EA of the student - These parts of questionnaire based on fourth and fifth specific objectives.

In addition, the respective science teachers are asked to answer through questions about these students' attitudes towards science subjects.

## 4. Data Analysis, Interpretation and Discussion

The general objective of this research is to find out the selected of SES and how it influences or relates to the EA of the students in the achievement of subject.  Based on 3 hypotheses, have been formulated fully and partially to achieve the general objective of this research, through this the solution for the research problem is attained. These 3 hypotheses have been arranged under their respective objectives and by testing each hypothesis, the solution for objective will be obtained.

- $H_1$- There is no significant relationship between fathers' occupation and Educational Aspiration (AM, SC, SAE).

This hypothesis tests there is no significant relationship between Fathers' Occupation and EA (null hypothesis).  Table 4 shows the Inter-Correlation test done to check the relationship between Fathers' Occupation and the sub-variables of EA. From this, there is a significant relationship between FO and EA (0.001).  The correlation between the above two variables is 0.194, meanwhile the value of non-determination factors (residual) is 96.2% ($R^2$ = 0.038).  Therefore, the null hypothesis $H_{11}$ is rejected.  That is, we accept the alternative hypothesis.  Hence, the hypothesis is reformulated as follows: There is a significant relationship between Fathers' Occupation and their Educational Aspiration.

- $H_2$ - There is no significant relationship between Parental education and Educational Aspiration (AM, SC, SAE).

This hypothesis tests there is no significant relationship between Parental Education and EA (null hypothesis). Table 4 shows the Inter-Correlation test done to check the relationship between Parental Education and the sub-variables of EA.  From this, there is a significant relationship between PE and EA (0.001).  The correlation between the above two variables is 0.252, meanwhile the value of non-determination factors (residual) is 93.7% ($R^2$ = 0.063).  Therefore, the null hypothesis $H_{12}$ is rejected.  That is, we accept the alternative hypothesis.  Hence, the hypothesis is reformulated as follows: There is a significant relationship between Parental Education and their Educational Aspiration.

- $H_3$- There is no significant relationship between Family income and Educational Aspiration (AM, SC, SAE).

This hypothesis tests there is no significant relationship between Family Income and EA (null hypothesis).  Table 4 shows the Inter-Correlation test done to check the relationship between Family Income and the sub-variables of EA. From this, there is a significant relationship between FI and EA (0.001).  The correlation between the above two variables is 0.215, meanwhile the value of non-determination factors (residual) is 95.4% ($R^2$ = 0.046).   Therefore, the null

hypothesis $H_3$ is rejected.  That is, we accept the alternative hypothesis.  Hence, the hypothesis is reformulated as follows: There is a significant relationship between Family Income and their Educational Aspiration.

| Socio-Economic Status Variables | Correlation of Co-efficient Matrix (r) Educational Aspiration | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Achievement Motivation | | | Self-Concept | | | Student's Attitude to Education | | | Composite Educational Aspiration | | |
| | r | R² | p | r | R² | p | r | R² | p | r | R² | p |
| FO | 0.242 | 0.058 | *0.001 | 0.081 | 0.007 | *0.041 | 0.006 | 0.000 | 0.879 | 0.194 | 0.038 | *0.001 |
| PE | 0.279 | 0.078 | *0.001 | 0.131 | 0.017 | *0.001 | 0.062 | 0.004 | 0.117 | 0.252 | 0.063 | *0.001 |
| FI | 0.215 | 0.046 | *0.001 | 0.137 | 0.019 | *0.001 | 0.083 | 0.007 | *0.037 | 0.215 | 0.046 | *0.001 |
| Composite SES | 0.523 | 0.273 | *0.001 | 0.306 | 0.094 | *0.001 | 0.167 | 0.028 | *0.001 | 0.506 | 0.256 | *0.001 |

*Table 4:  Inter- Correlation between SES and EA variables, p < 0.05, r =Co-efficient of Correlation, R² = Coefficient of Determination*
*\* Significant at 0.05 level*

| SES Sub-variables | Correlation of Coefficient Matrix (r) Education Aspiration | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | AM | | | SC | | | SAE | | |
| | r | R² | p | r | R² | Significant <0.05 | r | R² | p |
| FO | 0.242 | 0.058 | *0.001 | 0.081 | 0.007 | 0.062 | 0.006 | 0.000 | 0.879 |
| PE | 0.279 | 0.078 | *0.001 | 0.131 | 0.017 | 0.059 | 0.062 | 0.004 | 0.117 |
| FI | 0.215 | 0.046 | *0.001 | 0.137 | 0.019 | 0.057 | 0.083 | 0.007 | 0.087 |

*Table 5: Inter-Correlation between SES Sub Variables and EA Sub Variables*
*p < 0.05, r = Co-Efficient of Correlation, R² = Coefficient of Determination*
*\* Significant at 0.05 level*

## 5. Discussion and Conclusion
The following results were received when a test was done to check the relationship between the sub-variables FA, PE, and FI of the variable of SES and AM, SC, SAE of the variables of EA of the whole students.

### 5.1. Father's Occupation and Educational Aspiration of the Students
There is a close relationship between father's occupation and EA of the students. The research results show that there is a close relationship between fathers' occupational prestige and students' educational aspiration (r = 0.194 - Table 4).  Though previous researches show that there is a close relationship between SES and their EA, yet no research results are there to show the relationship between FO and their EA (Garasky, 1996; Wee Beng Neo 1995; Lockheed, Fuller and Nyirongo, 2000).  The results of this research bring the seven sub-variables of SES and study each sub-variable with EA of the students.  Through this the close relationship between FO and EA of the students are being brought out.  The EA of the students' whose fathers' occupational prestige of class I and II are of very high expectation, therefore, their expectation explores towards professional level, managerial and executive level jobs.  And the expectation of the students explores towards skill manual work and non-manual work (teacher, nurse, technical assistance, etc.) where the EA of the students' whose fathers' occupational prestige of class III, IV, and V.  Further, the expectation of the students shoes towards industrial related works where the EA of the students' whose fathers' occupational prestige of class VI and VII, and at the same time, 50% of the students do not have any kind of expectation. Therefore, it can be confirmed that there is a close relationship between fathers' occupation and the education aspiration of their children.  That is, it is true that children take their parents as models for their high level of occupation.

### 5.2. Parental Educational Attainment Level and Educational Aspiration of the Students
There is a close relationship between parental educational attainment level and EA of the students. The research results show that there is a close relationship between parental educational attainment level and students' educational aspiration (r = 0.252 – Table 4).  Parents who have university degree are included in level I and who have schooling grade 1 to 5 are included in level III.  There are sub-levels in each main level.  It can be observed as in the case of FO, the expectation of the children is very high towards high level of occupation whose parental educational attainment level is level I.  That is, the parents of this class motivate their children towards the importance of education and also, they show their children the high level of job opportunities through showing them the world trends.  And this takes the children to have high level of EA towards having higher degrees in education.  But this is lack in the children whose parental educational attainment level is level III.

Since the parental educational attainment level is less than GCE (O/L), the parents do not have sufficient knowledge in their children's future education, better job opportunities, etc.  Therefore, these parents are unable to take their children's educational aspiration to a higher level.  The children whose parental educational attainment level is level I

think of having postgraduate degrees and to become professors, etc. Also, it is observed that there is a different opinion among the parents from the urban and semi urban areas. Since most of the urban parents belong to level I and most of the semi urban parents belong to level III, the EA of the children belong to urban is higher than the EA of the children belong to semi urban. Hence, parents' educational attainment level influence highly on their children's EA and there is a close relationship between these two.

*5.3. Family Income Level and Educational Aspiration of the Students*

There is a close relationship between family income and EA of the students. It can be clearly indicated that the family income influence directly to EA of the children and FI is one of the main deciding factors for EA of the children. That is, the research results show that there is a close relationship between FI and EA of the children (r = 0.215 – Table 4). In FI, level I obtain more income compare with level III which obtains very low income. The family income influences to continue their formal education, to buy necessary learning materials, and to spend private learning of the children. The family income becomes a major factor for the students' future needs, their aspiration towards education, following job-oriented education, etc. Therefore, it can be considered that children belong to level I do not have any barriers to satisfy their needs and to have good educational aspiration. The above opportunities are less for the children who belong to level III. It can be observed that generally level II and III comes under semi-urban, especially level III families can be seen more in this region. Hence, children belong to this region might not have their educational aspiration fully. That is, it is obvious that the sub-variable FI of SES had a direct relationship with EA of the children.

The sub-variables FO, PE, FI, of the SES are directly linked with the EA of the children and have significant relationship independently. It is noteworthy that there were no such researches had been done to find out the relationship of EA with the above-mentioned sub-variables independently. Therefore, there is no doubt that if each family should maintain the above sub-variables in high and satisfactory level, the expected EA of their children will be attained. Through this, the expectations of the children in their education will be achieved and in particular they can attain high level in their achievement of science subjects as done in this research.

This study provided empirical and theoretical evidence to support socio-economic factors and educational aspiration of the students as being associated with early and late adolescents' achievement of science subject. The finding in this study are in line with most some previous research finding where family socio-economic status include specially in parents' educational attainment levels, father's occupational levels, and family incomes levels are related to adolescents' academic progress (Garasky,1996 ; Wee Beng Neo 1995 ; Lockheed, Fuller and Nyirongo, 2000).Parents' educational level has been consistently reported to be highly correlated with AA especially when both parents have high educational level as these parents have the ability to associate educational materials with progress in their children's education (Gorman, 1998; Lockheed, Fuller and Nyirongo, 1989; Sewell and Hauser, 1998; Sewell and Ornstein 2003;Trusty 2000) compared to parents with lower educational level. This finding also answers the question of whether the SES of semi-urban and urban parents has an impact on the AA of adolescents. In this study, the parents are in a semi-urban area. Thus, it is not so much of the geographical setting but more of the parents' economic status. In this case parents are in a semi-urban area, their educational level and reading materials in the home (cultural level of the home – CH) to a certain extent do influence children's school performance. To say that children in semi-urban area perform poorly compared to urban children would be generalizing as poor performance in school does not fully depend on location but more so on parents' SES.

In this study it is clearly evident that family encourage as well as the family interest in schools and classrooms affect children's achievement, attitudes and aspirations even after students' ability and family SES are taken into account. In this study shows that, high scores of the parental educational level (PE) and father's occupational level (FO) are led to high achievement of science subject of their students. In the research of Talton and Simpson (1990) it is found that self-concept, family and classroom were significant predictors of attitudes towards science education (ASE). They claim that high parent involvement was related to high science attitudes and interests among adolescents. Schibeci and Riley (1993) found that home environment and parent education exerted a strong influence within a casual chain linking instruction with attitude and achievement of science (Talton and Simpson, 1990). When we look at the research of Gogolin and Swartz (1992) we get some considerable information about the importance of the family environment. In this research it is written 'By strengthening family commitment to science and enhancing the opportunities for science interest to develop in children, the school may have greater success in nurturing that interest through involvement in science-related activities in the classroom'. So, many research studies showed that family environment and the SES of the family play a significant role in the development of the student in many areas.

## 6. Recommendation

- Results of the present study show that father's occupational level (FO) is very important for the academic achievement of students; hence it is recommended that government should take solid steps to increase the job opportunities and encourage the suitable jobs for world trend for in charge of the family. Career and counseling is very important programme for this society, because this factor has more relationship to academic achievement of the children.
- Results of the present study show that parental educational attainment level (PE) is very important for the academic achievement of students; hence it is recommended that government should take solid steps to increase and encourage male and female educational programmes. Because PE more relationship to academic achievement of the children.

- If the family income (FI) level will be increase it will lead to increase their children's academic achievement, hence it is recommended that government should take solid steps to increase the status of the family income level through various programmes.
- In a fast-developing world home environment has undergone a tremendous change that has affected students' moral and intellectual development. Hence, more researches should be conducted to explore and analyze other factors which may influence students' academic achievement and their personality.
- Low significant correlations were observed between academic achievement and educational aspirations and occupational aspiration. The majority of the students wanted to study for either a Bachelor's or a Master's degree and choose technical-related occupations (from the questionnaire). It implies that students may not know the academic requirements needed for the highest level of education and type of occupations they aspired for. So, the educationist and administrators should be arranged for fulfill their aspiration.
- The majority of the students were confident of obtaining a place for further education, the area of studies and the occupation they aspired for. So, the educationist and administrators should be arranged for fulfill the aspiration.
- Students were moderately knowledgeable about the field of studies and the occupations they aspired for. It means that they have no exposure to the world of work. If they have little information about courses available at the tertiary institutions as well as the information of the world of work, then students have been making unrealistic educational and occupation choices. So, policy makers, educationist and administrators should be considering what their want to do higher studies and achieve the aims.
- Parents should improve on their education levels through adult's education programme.
- Students from low SES background should try to persevere through financial hardships and remain in school because schooling eventually has a reducing effect on their poor plight.
- Teachers should help students who obtain low grades to develop academic curiosity in fields which are more relevant to them.

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