



## IMPACT OF PARENTS' EDUCATIONAL QUALIFICATIONS ON STUDENTS' ACADEMIC PERFORMANCE IN THE PLANTATION-SECTOR SCHOOLS

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### Abstract:

The major objective of the study was to find out the relationship between parents' educational qualifications and students' academic performance in mathematics at secondary-level classes. This study was conducted in two districts in the plantation areas of Sri Lanka. A total of 701 students who were selected randomly responded to a questionnaire. Hypotheses were formulated and tested using One-Way ANOVA test. The results revealed that there was statistically significant relationship between parents' educational qualifications and the academic performance of students. These findings lead to important practical suggestions to promote education of children in the plantation sector.

**Keywords:** parents' educational qualifications, academic performance in mathematics, plantation schools

### 1. Introduction

One of the most important components in human resources development is education. It helps to improve the living standard of people in poor and neglected sector of the society (Yaseen et al. 2017). Many factors contribute to the academic performance of students in school education. These factors can be categorized into many ways and the present study categorized them into two major groups namely school-related factors and family-related

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factors (Piotrowsky, 2016; Quin et al. 2015; Kerr, 2014; Chowa et al. 2013; Azam, 2012; Kocakaya and Gonen, 2012).

School-related factors are linked with the interaction of students with available human and physical resources in the school environment. Family-related factors include students' family background, psycho-social environment of family, factors related to physical environment at home, parental involvement and educational qualification of parents.

Studies by Khan et al. (2015) and Jabor et al. (2011) have suggested that parents' educational qualifications are one of the best predictors of student achievement. Singh et al. (2014) found that students whose parents have higher educational qualifications differ significantly from the students whose parents are illiterate or less educated. The present study focused on family-related variables (such as parents' educational qualifications) and students' academic performance in mathematics.

## 2. Literature Review

In the educational system, students from parents with higher educational qualifications perform better than those from parents with lower qualifications (Singh et al. 2016, Khan et al. 2015, Suleman et al. 2012, Jabor et al. 2011). Singh et al. (2016) further stated that, children from parents with higher educational background showed higher and average academic achievements and vice versa.

Educated parents have more influence on their children to perform well in studies at secondary school level because they usually show interest and care on their children's academic performances or achievements, choice of subjects and career (Khan et al. 2015; Suleman et al. 2012).

Besides from actively involved in children's education, educated parents provide suitable home environment for learning. They serve as a model for learning; determine the educational resources available in the home and develop particular attitudes and values among these children towards education (Jabor et al. 2011)

These findings reveal that children of educated parents have a higher level of life satisfaction and fewer problems and are relatively more confident, self-reliant, and free from anxieties and other psychological problems. However, there is a research gap regarding educational performance of the children in the plantation sector in Sri Lanka. For historical reasons plantation sector schools had to wait about twenty years to be integrated into the national education system (Thanaraj, 2004; Ramathass, 2013)<sup>ii</sup>. Hence there is a dearth of studies that focused on the educational performance of the plantation and other disadvantaged children. Therefore, the present study intended to fill the knowledge gap on the impact of parents' educational qualifications on students'

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<sup>ii</sup> Dualism in education was removed by the Assisted Schools and Training College Act of 1960 by which almost all the missionary schools were taken over by the government. But about 800 plantation schools were not integrated into the national education system until the late part of 1970s, by which period the statelessness of the plantation people was solved.

academic performance and also attempt to suggest relevant suggestion to promote education of such children.

### 3. Methodology

This study was conducted using a questionnaire which was distributed to Grade 11 students. The questionnaire consists of two sections where the first section collects the demographic information of the students and the second section measures the students' perception of family-related factors including parent's educational qualifications. The measures were adapted from Zarookdeen (2008) and Dharmawardhana (1995). A total of 701 respondents from Grade 11 students in two plantation districts of Sri Lanka namely Nuwara-Eliya and Ratnapura. In addition, the students' performance in mathematics were taken from the respective schools' (sixty four sample Schools) in examination marks schedule from the school principal with the permission of zonal education office.

Previous study findings have revealed that educational qualifications of parents have a significant impact on student academic performance (Khan et al. 2015; Farooq, 2011).

Based on the above findings following two hypotheses were formulated and tested to achieve the objectives of the current study:

**H1a:** There is a significant relationship between mother's educational qualifications and students' performance.

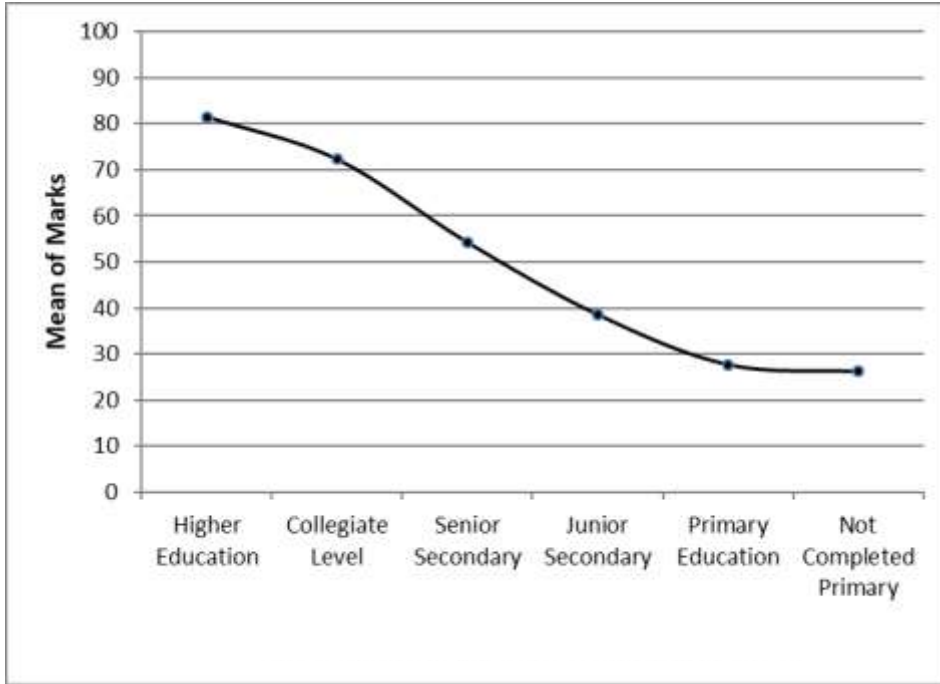
**H1b:** There is a significant relationship between father's educational qualifications and students' performance.

One-way ANOVA technique was used to test both hypotheses. The results are presented in Table 1 and Table 2.

**Table 1:** ANOVA results on the relationship between mother's educational level and students' performance in mathematics

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	256.344	82	3.126	3.852	.000
Within Groups	502.336	619	.812		
Total	758.679	701			

The following line graph depicting the students' mean scores and the mother's educational qualification in Figure 1 further describes the relationship between mother's education qualification and student performance in mathematics:



**Figure 1:** Relationship between mother's educational qualification and students' academic performance in mathematics

As shown in Table 1, the p-value for the independent variable (mother's education qualification) is less than 0.05. Hence, student performance is significantly dependent on mother's education level.

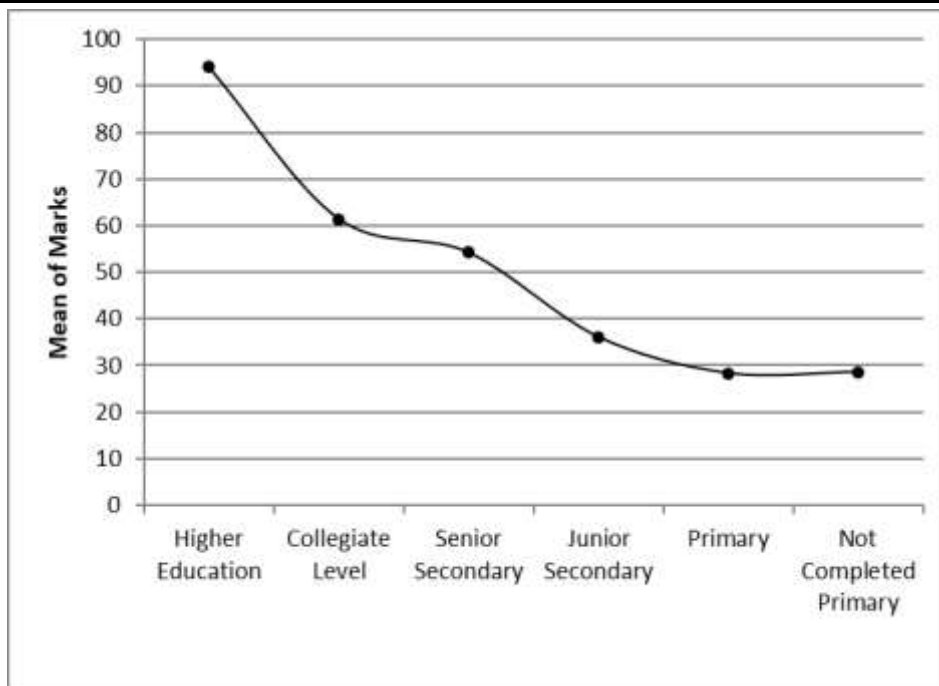
Furthermore, as shown in Figure 1, the students' mean scores positively related to the mother's educational qualification. Therefore, hypothesis H1a is supported.

**Table 2:** Relationship between father's educational qualifications and students' performance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	58820.243	5	11764.049	33.656	.000
Within Groups	243275.975	696	349.534		
Total	302096.218	701			

As shown in Table 2, the p-value for the independent variable (father's education qualifications) is less than 0.05. Hence, student performance is significantly dependent on father's education level.

Furthermore, as shown in Figure 2, the students' mean scores are positively related to their father's educational qualifications. As a result, hypothesis H1b is also supported in the present study.



**Figure 2:** Relationship between father's educational qualification and students' academic performance in mathematics

#### 4. Discussion

The results indicate a statistically significant relationship between parents' educational qualifications and students' performances. Highly educated parents have more influence on their children to perform well in their studies because the parents usually show interest and care in their children's academic performances. Accordingly, we can expect that performances of the students' will also be high in families with well-educated parents, supportive psycho-social environment, suitable physical environment and resources and better involvement of parents.

Further analysis on the data reveals that a considerable number of parents (25%) have not completed at least their primary education. As a whole, more than 80% of mothers and fathers were not educated enough to guide their children's (senior secondary classes) homework or help them to prepare for examinations.

The current findings are consistent with Khan et al. (2015) who suggested that highly educated parents have more influence on their children's academic performance. The findings have also been supported by other studies done by Singh et al. (2016) and Farooq et al. (2011).

The findings from this study lead to several important implications to practice. Since parental education plays an important role in the academic performance of children it is suggested that community leaders should take an interest in raising the education level of uneducated or less educated parents. Such parents themselves should take attempt to make use of such facilities given by the community to improve their educational level. The government too can invest in improving adult literacy through schools and other community organization. Although Sri Lanka has achieved higher

literacy rate (92%) compared to other developing countries there are pockets in the country particularly the plantation areas whose literacy rate (66%) is well below the national standards (Department of census and statistics, 2012). Hence the government should take meaningful actions to bring the plantations and other rural areas at par with the national level as soon as possible. This will help to enhance the achievement levels of students in the plantation as well as rural schools.

On the other hand, teachers and other educational administrators should take positive measures to give extra support to children whose parents are uneducated or less educated. In the plantation areas of Sri Lanka, the trade unions can play a pivotal role in making the parents to understand the importance of educating themselves in order to effectively contribute towards improving their children's performance in education.

## **5. Conclusion**

The results of this study have shown that there is statistically significant relationship between parents' educational qualifications and students' performances. Parents with higher educational qualifications are able to positively influence their children towards their academic achievement much better than their less educated counterparts. This finding has also been well supported by earlier studies conducted elsewhere in the world. Hence it is suggested that appropriate actions should be undertaken by educational policy makers, administrators and other community organizations to effectively address this issue.

### **5.1 Limitations of the Study**

The present study was conducted in the secondary schools in the plantation sector in Sri Lanka. Hence, there is a limitation in applying the findings of this study to all schools in the country due to the different cultural and socio-economic difference among them. However, the findings of the study may be relevant to similar schools in plantation area.

### **5.2 Future Research Directions**

Family factors were considered as a variable in this study. Parental educational level was considered in this variable. However, the impact of the educational level of siblings has not been considered in this study which could be a research topic in future studies.

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