
**INFLUENCE OF EDUCATIONAL AND FINANCIAL STATUS OF
PARENTS ON THE ACADEMIC PERFORMANCE OF SECONDARY
SCHOOL STUDENTS: A CASE STUDY IN HYDERABAD DIVISION-SINDH**

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ABSTRACT

This research is conducted, in order to analyze the students' academic performance at secondary school level in Pakistan. This is a case study conducted in Hyderabad Division of Sindh Province in Pakistan. The study was focused to the students who have passed matriculation class (Class-X), equivalent to secondary level in Pakistan(10 years of education). Sample size of 1097 higher Secondary level students were randomly selected from various colleges and schools in a way that around 150 students should take part in the survey from each institute. The sample selection was further divided on gender (Male = 448, Female = 648) and locale (Urban=455, Rural=641) basis. A data collection questionnaire was developed by the researchers and implemented for data collection. After collection of the data from desired population, the statistical analysis based on Pearson's Chi-square and Correlation models were carried out in SPSS. The conclusion inferred from the data analysis of the study, strongly revealed that the students' academic achievement at high school secondary level was highly associated to their parent's educational level and socio-economic background. Therefore, it is strongly recommended financial condition of the population must be enhanced by taking appropriate measures. In order to coup tough financial conditions at their homes, deprived students should be provided adequate scholarships. Free stationary and books should also be provided at schools.

Keywords: Academic Performance, Academic Achievement, Socio-Economic Background Impact, Parental Education Level Influence

INTRODUCTION

Many research studies have been conducted to find the underlying aspects effecting students' academic achievement and performance at schools. The major findings revealed that socio-economic and parental educational status are main factors liable for the academic achievements of the students (Jeynes, 2002; Hochschild, 2003; Eamon, 2005). Moreover this is firmly thought that adverse effects on students' performance are caused by their low socio-economic background (Thomson, 2018). Poor financial conditions create extra pressure at home and also causes major impediment towards access resources required to assist performance at schools (Jeynes, 2002; Eamon, 2005). Further to this, studies conducted by Eamon (2005) and Hochschild (2003) revealed that early school drop off ratio is high for children belonging low socio-economic background families. Morakinyo (2003) suggested a constructive relationship between enhanced academic performance achieved by the students and better socio-economic status of their families in society.

Similarly, White (1982) states, "The family characteristic that is the most influential predictor of school performance is socioeconomic status; the higher the socioeconomic status of the student's family, the higher his academic achievement". White (1986) justified his statement in a Meta data analysis conducted by himself where he found a convinced relationship between academic achievement of the students and their socioeconomic status. In the Meta study, the author's conclusion was based on positive correlation factors (ranges - 1 to -7) between the variables. This suggests that higher the socio-economic status better the academic performance presented by the students. Similarly, another author, Kruse (1996) discoursed that students from lower socio-economic backgrounds have performed poorly at schools as compared to those who belong to higher socio-economic groups. The results show that there has been a significantly statistically difference and transformation between academic achievements and accomplishments of lower socio-economic as compared to those groups who belong to higher socio-economic groups and environments. Whereas the evidences shown from other Meta data study conducted by Sirin (2005) revealed various other factors of socio-economic background including education level of the parents, annual income of families as well as occupation of the parents also influencing in some or other ways on students' educational

achievement and performance in school. Other researchers, Rouse and Barrow (2006) state that socioeconomic status leaves the significant effects throughout life of a children.

Socio-economic factor also influences students' attitudes at schools and learning processes. Greenfield (1996) considers inconclusive outcome from the studies conducted to gage out the influence of students' attitude on their interests in science or achievements in science fields despite many science educators believe its significant role in students' learning process. It has been generally believed that student's academic achievements in science subjects are highly associated with student's overall attitude towards science. In this connection the focusing point of research activity was to investigate connection between cognitive and affective learning outcomes of the students (Wong & Fraser, 1996). Many researchers have shown that students' achievements in science is highly and positively correlated with attitude towards science and eventually lead to students' careers in science (Parker & Gerber, 2000; Simpson & Oliver 1990). From the above discussion it can be concluded that in sociological research studies, there is an established connection between parental socio-economic status in society and students' academic performance. According to Graetz (1995), nevertheless, disagreement exists over how to measure socio-economic status, but most studies indicate that low socio economic status of family have adverse impacts on their performance in school compared to children from high socio-economic background.

OBJECTIVES OF THE STUDY

- To examine the status of student's academic performance on their locale and gender bases at secondary level in Sindh Province.
- To probe the influence of socio-economic factors on student's overall academic performance at secondary level in Sindh Province, Pakistan.
- To work out the connection between parental educational level and their children's academic performance.
- To give recommendation to improve the situation and for further research.

RESEARCH HYPOTHESIS

On the above discussed objectives of the study, following null hypotheses were drawn:

- H₀₁:** There is no significant association prevails between students' academic achievement on the basis of their gender (female/male).
- H₀₂:** There is no significant association between students' academic achievement and their locale (Urban/Rural areas).
- H₀₃:** There is no significant association between students' academic achievement and their parental socio-economic status.
- H₀₄:** There is no significant association between students' academic achievement and their parental educational level.

RESEARCH METHOD

This study was descriptive in nature and survey type. Pearson's Chi-square was used to verify null hypotheses and Pearson's Co-relational was used to investigate the level of impact between the variables.

POPULATION AND SAMPLING

The study is conducted to find out the effects of socio-economic background based on demographic variables and parental financial and educational status on students' academic achievement at secondary school level. The students taking science as major in their intermediate level and have recently passed matriculation (SSC) examination. The students belong to various colleges and higher secondary schools (HSS) of Hyderabad division. Participants are randomly selected. Balanced proportion of rural and urban population lives in Hyderabad division as well as population is based on different socio-economic and ethnic backgrounds. For the data collection purpose Hyderabad division was divided into two locality regions urban and rural and the sample was composed on the basis of gender. Two colleges or HSS were selected randomly from rural districts including Matiari, Tando Mohammad Khan, Jamshoro, and Dadu districts. Whereas, six colleges were selected from Hyderabad urban district. Colleges were also selected on gender basis. The data is collected for this study from 1096 students from different colleges and higher secondary schools of Hyderabad division in Sindh province. Average student number in this study varies between 100 to 150 per college/HSS.

INSTRUMENTATION

A questionnaire was developed to get the data from the participants based on following parameters; Gender, Town, Institute name, Matriculation Grade, Subject you like the most, Parental Education Level, Parental Financial status/Annual income.

DATA ANALYSIS

Annual Parental Income: Annual income in Pakistani Rupees of the families belonging to the respondents is given in TABLE-1. It can be seen that most of the participants belong to lower-middle class to middle class group (less than 0.1 million to 1 million per annum).

TABLE-1: ANNUAL INCOME IN PERCENTAGE			
Annual income in PKR Million (approx)		Frequency	Percentage
	>2	50	4.6
	> 1.5	61	5.6
	> 1	99	9.0
	>0.5	214	19.5
	>0.1	279	25.4
	<0.1	394	35.9
	Total	1097	100.0

Parental Education Level: Education level received by the parents of the respondents is given in TABLE-2. Here we can see that most of the parents are highly/moderately educated and finished graduation or intermediate level.

TABLE-2: EDUCATION LEVEL OF THE PARENTS OF THE RESPONDENTS.		
Education level	Frequency	Percentage
Both finished Graduate degree	160	14.6
One finished Graduate degree	241	22.0
Both went college degree	175	16.0
One went college degree	132	12.0
Both finished High school	91	8.3
One finished high school	66	6.0
Both attended Primary school	85	7.7
One attended Primary school	49	4.5
One/both attended religious school (Madrasah)	23	2.1
Both are illiterate	75	6.8
Total	1097	100.0

Academic Performance of the Students: In FIGURE-1 a comparison of the students' performance is given according to their gender. We can see that female students slightly perform better than their male counterparts in matriculation (Class-IX-X) examinations. In

TABLE-3 a relationship between the variables is statistically analyzed and Pearson's Chi-Square test results indicate that significant association between the variable ($X^2(4) = 12.565$, $p < .05$) exists. This rejects the null hypothesis and confirms that gender based students' achievement exists and female students performed better than male students.

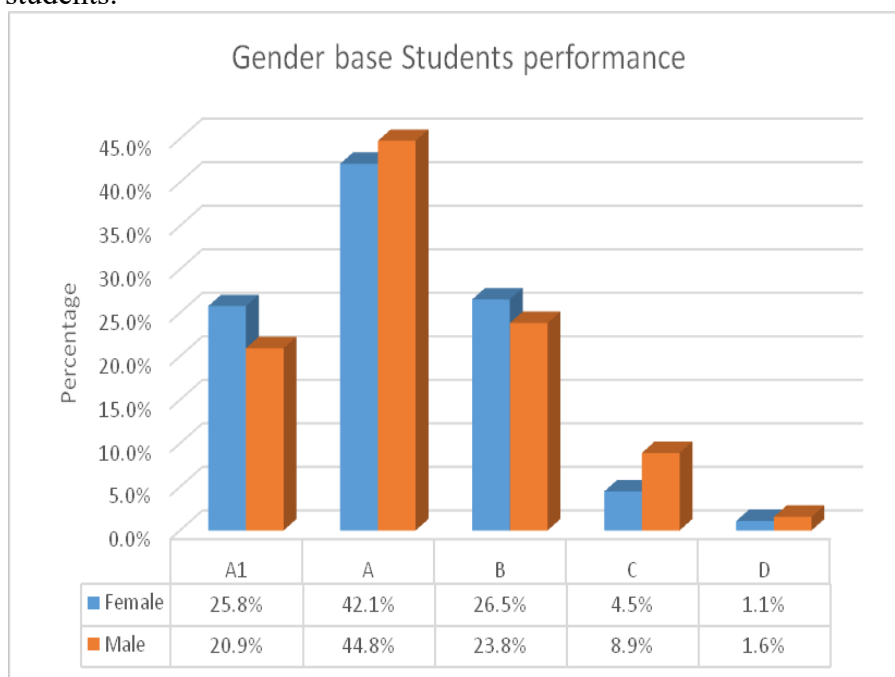


FIGURE-1
STUDENTS ACADEMIC PERFORMANCE MEASURED
AS THEIR MATRIC GRADES

TABLE-3
PEARSON'S CHI-SQUARE ANALYSIS OF STUDENTS'
PERFORMANCE ACCORDING TO GENDER

	Value	df	p-value
Pearson Chi-Square	12.565	4	.014
Likelihood Ratio	12.416	4	.015
N of Valid Cases	1097		

Comparison of the students' performance is given according to their Locale based on Urban and Rural areas of Hyderabad division. It can be seen that, in matriculation (Class-IX-X) examinations, students belonging to Rural areas performed better than their counterparts living in Urban areas. In TABLE-4, a relationship between the variables is statistically analyzed and Pearson's Chi-Square test results indicate that significant association between the variable ($X^2(4) = 26.11$, $p < .01$) exists. This rejects the null hypothesis and confirms that Locale based students' achievement exists and the students belonging to rural areas in Hyderabad division performed better than the students living in Urban areas of the division.

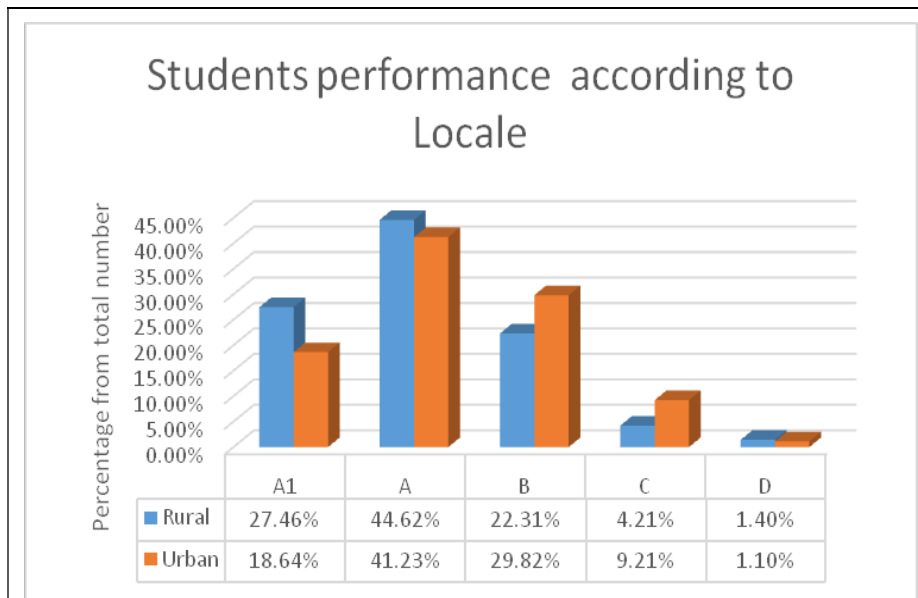


FIGURE-2
STUDENT PERFORMANCE BASED ON THEIR MATRICULATION GRADES ACCORDING TO LOCALE

TABLE-4
PEARSON'S CHI-SQUARE ANALYSIS OF STUDENTS' PERFORMANCE ACCORDING TO LOCALE

	Value	df	p-value
Pearson Chi-Square	26.11	4	.000
Likelihood Ratio	26.08	4	.000
N of Valid Cases	1097		

Relationship Between Academic Performance and Financial Conditions: In Figure-2 the performance of the students (their matric grades) is compared against financial conditions of their families. Here we can see that students belonging to higher income group families achieve higher grades. Perhaps, this is due to their higher access to resources as compared to lower income group families. In order to further analyze the relationship between the variables, analysis of the standardized residuals is given in TABLE-5. The positive standardized residuals (residuals divided by standard deviation) indicate that there was higher number of respondents belonging to certain grades for the students belonging to certain financial group than expected. Whereas, the negative standardized residuals indicate opposite to that. It can be seen clearly that higher grades or better performance of the students is more than expected for high income group respondents. Pearson's Chi-Square test is also conducted to verify the relationship between the students' performance and parental financial conditions. The data shown in TABLE-6 indicates significant association between the variable ($\chi^2(20) = 42.4$, $p < .005$) exists. Which further confirms that students' achievement is highly associated with their financial conditions. TABLE-6 indicates that significant positive correlation exists between annual income (financial condition) of the parents and students' academic performance ($r = .131$ and $p = 0.00$) at correlation significance level of 0.01, therefore, the null hypothesis "there is no significant relationship between parental financial condition and students' academic performance" is rejected.

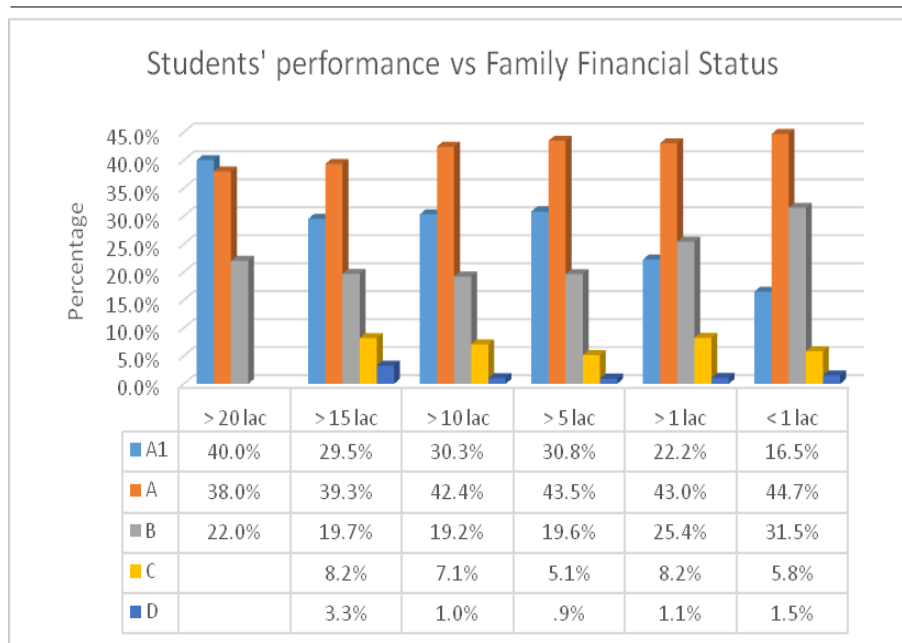


FIGURE-2
COMPARISON OF STUDENT'S PERFORMANCE VS FINANCIAL
CONDITIONS OF THE FAMILIES

TABLE-5:
THE STANDARDISED RESIDUALS FOR ACADEMIC PERFORMANCE
VS FINANCIAL STATUS

Grade	Annual Income in PKR > 2 M	> 1.5 M	> 1 M	>0.5 M	>0.1 M	<0.1 M
A1	2.3	.9	1.3	2.1	-.5	-3.0
A	-.6	-.5	-.1	.1	-.1	.4
B	-.5	-.9	-1.2	-1.7	.0	2.4
C	-1.8	.6	.3	-.7	1.3	-.4
D	-.8	1.4	-.2	-.4	-.3	.4

TABLE-6
PEARSON'S CHI-SQUARE AND PEARSON'S CORRELATION TESTS
FOR ASSOCIATION BETWEEN STUDENTS' PERFORMANCE AND
THEIR PARENTAL FINANCIAL CONDITIONS

	Value	df	p-value
Pearson Chi-Square	42.409	20	.002
Pearson's R	0.131*		.000
N of Valid Cases	1097		

*Correlation is significant at the 0.01 level (2-tailed).

Relationship between Academic Performance and Parental Education Level: It is commonly considered that children belonging to educated families perform better in schools (Simpson & Oliver, 1990). Here we present a graphical comparison in

**FIGURE-3:
PERFORMANCE OF STUDENTS ACCORDING TO THEIR PARENTAL**

. In the figure performance of the students is compared against their parental education level. Here we can see that students belonging to highly educated families achieve higher grades. In order to further analyze the association between the variables, analysis of the standardized residuals is given in TABLE-7. The positive standardized residuals indicate that students belonging to higher level of parental education get higher grades than expected. Whereas, the negative standardized residuals indicate opposite to that. It can be seen clearly that higher grades or better performance of the students is more than expected for students belonging to higher educated families. Pearson's Chi-Square test shown in TABLE-8 indicates significant relationship between the students' performance and parental education level i.e., $X^2(36) = 150.86$, $p < .005$. Significant positive correlation also exists between parental education level and students' academic performance ($r = .245$ and $p = 0.00$) at correlation significance level of 0.01, hence, the null hypothesis "there is no significant relationship between Parental education level and students' academic performance" is rejected.

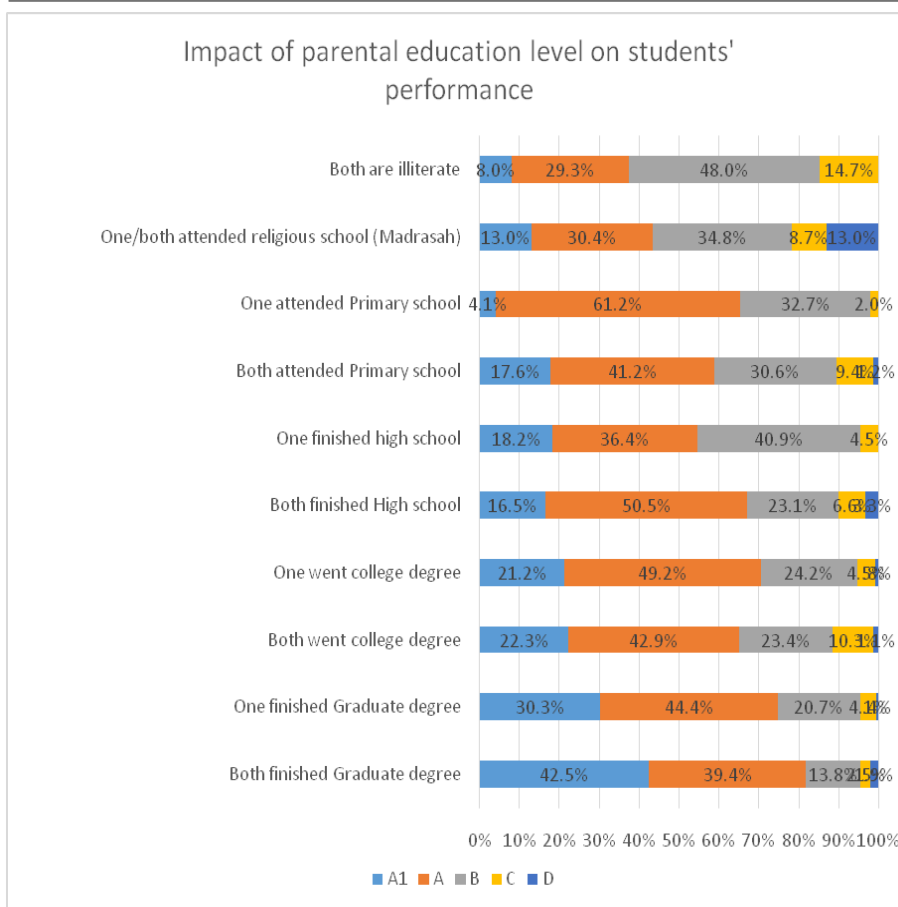


FIGURE-3:
PERFORMANCE OF STUDENTS ACCORDING TO THEIR PARENTAL

TABLE-7
THE STANDARDIZED RESIDUALS FOR ACADEMIC PERFORMANCE
VS PARENTAL EDUCATIONAL LEVEL

Grades	Parental Education Level									
	Group-I	Group-II	Group-III	Group-IV	Group-V	Group-VI	Group-VII	Group-VIII	Group-IX	Group-X
AI	4.9	2.1	-.4	-.6	-1.4	-.9	-1.2	-2.8	-1.1	-2.8
A	-.7	.3	-.1	1.1	1.1	-.8	-.3	1.9	-.9	-1.8
B	-1.9	-1.3	2.1	-.8	.1	-.6	1.1	-1.2	.5	2.9
C	-1.9	-1.3	2.1	-.8	.1	-.6	1.1	-1.2	.5	2.9
D	.7	-1.2	-.2	-.5	1.7	-.9	-.1	-.8	5.0	-1.0

Group-I (Both finished University), Group-II (One finished University), Group-III (Both completed college), Group-IV (One completed college), Group-V (Both finished High school), Group-VI (One finished High school), Group-VII (Both attended Primary school), Group-VIII (One attended Primary school), Group-IX (Attended Religious school), Group-X (Both illiterate)

TABLE-8:
PEARSON'S CHI-SQUARE AND PEARSON'S CORRELATION TESTS
RESULTS FOR STUDENTS' PERFORMANCE VS PARENTAL
EDUCATION LEVEL

	Value	df	Asymptotic Significance (2-sided)
Pearson's Chi-Square	150.86	36	.000
Pearson's R	0.245*		.000
N of Valid Cases	1097		

*Correlation is significant at the 0.01 level (2-tailed).

RESULTS AND DISCUSSION

This study was conducted to investigate the underlying factors effecting students' performance at school and primarily focused to find the connection between students' performance or achievement and

parental financial conditions and educational background. Further to this, impact of demographic factor is also included. The gender base impact revealed that female students slightly perform better as compared to their male counterparts in matriculation (Class-IX-X) examinations. Similarly, students Locale base difference in performance revealed that students belonging to Rural areas of Hyderabad division performed better as compared to those who lives in Urban areas of the same division.

The major findings and results of this study showed that girls performed slightly (but statistical significant) better than male counterparts in their matriculation grades. Similarly, students belonging to higher income groups and higher educational background also performed better in matriculation grades. These results are consistent to various studies conducted in Pakistan (M.S. Farooq *et al.* 2011; Qaiser, *et.al.*, 2012; Rana, 2002; Ghazi, *et.al.*, 2010). Similar findings were reported elsewhere by Thomson(2018) and Bogges (1998).

One of the significant finding of the study is based on analyzing the impact of socio-economic condition on students 'performance in school. It can be easily concluded from the study that those students belonging high income group has performed better in their matriculation results. Further to this, it was also found that student's performance was positively correlated with family income. The study discloses that the family whose annual income is above 1.5 million has significant positive effect on students 'academic performance. The findings of this study are in complete agreement with previously findings of the studies conducted in Khyber-Pakhtunkhwa Province of Pakistan by Ghazi, *et.al.* (2013). Another major finding of this study disclosed the impact of parental education level on their children's performance in school. It can easily be concluded from this study conducted in Sindh province, that students belonging highly educated families perform better in schools and significant positive correlation exists between the parameters.

CONCLUSION

The study was aimed to work out the association between the parent's socio-economic conditions and education level and their children's academic performance at secondary level in Sindh, Pakistan. Significant association was found between the parameters.

higher the financial condition and education level of the parents, better their children perform in the schools.

In the past years, major research activities have been undertaken which showed socioeconomic background of the parents does have significant effect on their children's' academic achievements. The findings of this research study conducted in Sindh province also follow the previous findings. But still it is not clear yet how this effect is transferred. This indicates new ways that need to be followed to develop fully understanding of this phenomenon. In order to fully understand the impact for parental socio-economic status and educational level on their children's performance in schools, research studies need to be conducted on various education levels especially primary and secondary levels. To scale up the study, this study needs to be conducted in various districts of Sindh province. Further to this studies need to be conducted for identifying and characterize underlying factors might be affecting students' performance, such as parental role, school environment, teachers' role, as well as use of modern technological gadgets such as mobile phones and tablets. In order to enhance students' performance at schools, their parental financial conditions need to be improved.

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