Factors Affecting Scholastic Performance in School Children.

Pagadpally Srinivas¹, S. Venkatkrishnan²

¹Associate Professor, Dept of Paediatrics, Vinayaka Mission's Medical College, Karaikal ²Registrar, Ramakrishna Hospital, Coimbatore.

Abstract:

Aim: To assess-

i)Factors that influence the school performance of children;

ii)To determine modifiable the factors;

iii)To offer counseling for parents, teachers and students whenever needed

Methodology: This study is a prospective, school based, horizontal study among 1000 secondary school children in age group 10 to 15 years in Karaikal region.

Results:

- ✓ Well educated parents shows positive influence on academic achievements of children.
- ✓ Teachers play a vital role in the academic performance of children. Good attendance commiserates with good scholastic performance
- ✓ Family disharmony showed negative influence on scholastic performance.

Keywords: scholastic performance; broken home; teacher influence.

I. Introduction

Scholastic achievement has become an index of child's future in this highly competitive world. Poor scholastic performance has a significant impact on the child and adolescent potential in the society.

Factors Influencing School Performance:

i) Home related factors:-

Factors which hinders school performance are Parental illiteracy, lack of encouragement and lack of role models, Alcoholic and workaholic parents, contribute to academic performance.^{2,3}

ii) The school related factors:-

The child spends most of his time in school and here his environment is exerting a different influence on performance through curricula, teaching techniques, relationship.^{4,5}

iii) Child-Teacher Relationships:-

A growing body of evidence supports this claim as child-teacher attachment relationships have been found to be important for children's social and emotional development.⁶

The psychological factors:

Psychosocial factors (PSFs) such as motivation, social control, and self regulation, play key roles in classroom learning.⁷ The motivation to achieve academic outcomes in educational settings via certain personality characteristics and attitudes will bring the desired outcome in scholastic performance.⁸

Disease related factors:

These conditions have been reported to have an independent effect resulting in scholastic performance.

i)Visual impairment: worsening in handwriting and slowness in copying from the board.

ii)Hearing Impairment:

Even mild to moderate hearing loss in childhood is associated with poor language development and lower educational.

Aims And Objectives

To assess

- I. Factors that influence the school performance of children
 - 1. Home related factors
- 2. School related factors
- 3. Social related factors
- 4. Psychological related factors
- 5. Disease related factors.

- II. To determine modifiable the factors.
- III. To offer counseling for parents, teachers and students whenever warranted.

Ethical Issues

The clearance was obtained from ethical committee of Vinayaka Missions Medical College & Hospitals prior to the study. The permission to conduct this study was obtained from The Chief Educational Officer of Karaikal. Necessary permission from the Principals of the schools was obtained.

II. Materials And Methods

Study design: This study is a prospective, school based, horizontal study among secondary school children in Karaikal region.

Study subjects: Children of age group between 10 to 15 years studying in 6th to 10th standard in selected 10 schools of Karaikal region.

Study Population: 1000 school children in age group 10 to 15 years from the selected schools of Karaikal. **Period of study:** The present study was carried out from June 2014 to March 2015,

III. Methods And Systems For The Study

The study design for collecting the data was chosen by direct observation of children in the respective schools, interviewing the teachers and children and collecting the data in the form of a questionnaire. The teenage screening questionnaire is obtained from the **Child Development Centre** (CDC), Thiruvananthapuram, Kerala.

Inclusion criteria:

- 1. 10 to 15 years children of 10 selected schools
- 2. The students who gave oral consent.

Exclusion criteria:

- 1. The students with:
- I. Chronic medical illness
- II. Below average IQ
- III. Physically challenged
- 2. Students who did not give consent

Methodology: After informed verbal consent, the questionnaire was given to students.

In each class the questionnaire and the correct method of filling it up was explained to the students.

Since the participating schools are English medium schools, the original questionnaire of CDC is directly used.

The students were counseled to write the answers without any prejudice and bias.

The data was analysed with student's t test, chi square test and relevant statistical tools.

IV. Results

Grading system used:

The overall performance of the students was graded as with reference to the marks obtained in the tests/exams held in that academic year, for convenience of data analysis.

- 1. >80% Excellent (N=261)
- 2. 60 -79% Good (N=273)
- 3. 50 59% Average (N=219)
- 4. 35 49% Poor (N=185)
- 5. <35% Very Poor (N=62)

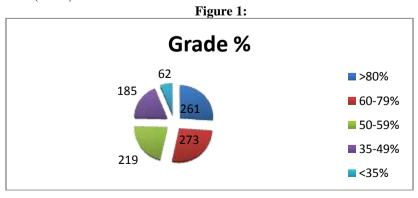


Table 1: AGE

Age	Frequency	Percent
10-13 yrs	760	76
14-17 yrs	240	24
Total	1000	100

Figure 2: SEX

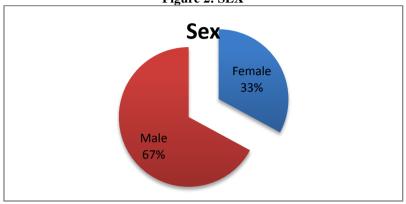


Table 2: SEX VS SCHOLASTIC PERFORMANCE

		Table 2: 51	LA VOSCI	ULASTIC	I LKI UKW	IANCE		
			Grade Percenta	age			Chi-	
Sex	Less than 35%	35-49%	50-59%	60-79%	80% and above	Total	Square	p-value
Female	18 (5.5)	36 (10.9)	50 (15.2)	86 (26.1)	139 (42.2)	329 (32.9)		
Male	44 (6.6)	149 (22.2)	169 (25.2)	187 (27.9)	122 (18.2)	671 (67.1)	74.851	< 0.001
Total	62 (6.2)	185 (18.5)	219 (21.9)	273 (27.3)	261 (26.1)	1000 (100)		

Chi Square value = 74.851

p-value < 0.001

Conclusion: p value < level of significance (0.05)

There is a significant association between Gender and scholastic performance of children. Female children are having better scholastic performance than male children

Table 3: LITERACY STATUS OF MOTHER VS SCHOLASTIC PERFORMANCE

Literacy status of Mother		C	Grade Percenta		Total	Chi-Square	p-value	
	Less	35-49%	50-59%	60-79%	80% and			
	than				above			
	35%							
No Schooling	0 (0)	6 (18.8)	5 (15.6)	15 (46.9)	6 (18.8)	32 (3.2)	244.700	< 0.001
Primary schooling	16 (11.6)	33 (23.9)	42 (30.4)	36 (26.1)	11 (8)	138 (13.8)		
Secondary schooling	26 (6)	125 (28.7)	104 (23.9)	109 (25.1)	71 (16.3)	435 (43.5)		
Higher secondary	7 (5.5)	11 (8.7)	33 (26)	49 (38.6)	27 (21.3)	127 (12.7)		
Degree	8 (4.3)	10 (5.4)	27 (14.6)	52 (28.1)	88 (47.6)	185 (18.5)		
Post Graduation	2 (6.5)	0 (0)	2 (6.5)	5 (16.1)	22 (71)	31 (3.1)		
Technical	2 (22.2)	0 (0)	0 (0)	2 (22.2)	5 (55.6)	9 (0.9)		
Professional	1 (2.3)	0 (0)	6 (14)	5 (11.6)	31 (72.1)	43 (4.3)		
Total	62 (6.2)	185 (18.5)	219 (21.9)	273 (27.3)	261 (26.1)	1000 (100)		

Chi Square value = 244.700 p-value < 0.001

Conclusion: p value < level of significance (0.05)

Scholastic performance of the students improves as the literacy status of Mother is higher. Scholastic performance of the students becomes poor as the literacy status of the mother is low

Table 4: FACILITATING FACTOR AT HOME VS SCHOLASTIC PERFORMANCE

	,							
Facilitating Factor		Gı	Total	Chi-	p-value			
	Less	Less 35-49% 50-59% 60-79% 80% and						
	than				above			
	35%							

No	19 (6)	67	83 (26.2)	84 (26.5)	64 (20.2)	317	11.984	0.017
		(21.1)				(31.7)		
Yes	43 (6.3)	118	136	189	197	683		
		(17.3)	(19.9)	(27.7)	(28.8)	(68.3)		
Total	62 (6.2)	185	219	273	261	1000		
		(18.5)	(21.9)	(27.3)	(26.1)	(100)		

Chi Square value = 11.984

p-value < 0.017

Conclusion: p value < level of significance (0.05)

Facilitating factors at home such as – separate room, separate table, electric light etc. 46.6% of children's performance is good to excellent, even if there is no facilitating factor at home 56.5% children performance is good to excellent when there is facilitating factor at home Scholastic performance of the children improves with facilitating factors at home.

Figure 3: ASSISTANCE OF MOTHER FOR STUDY AND SCHOLASTIC PERFORMANCE

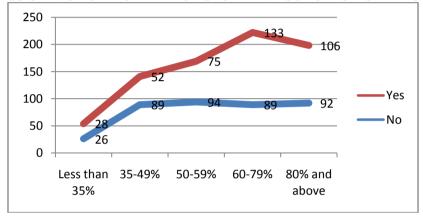


Table 5: INFLUENCE OF TEACHER VS SCHOLASTIC PERFORMANCE

Table 3. II	IL DOELL	CE OF TE	ACHER	b bellet	ABIICII	DICE OIL	IANCE	
Influence of		Gr	ade Percen	tage			Chi-	n
teacher(encoura ging)	Less than 35%	35-49%	50-59%	60-79%	80% and above	Total	Squar e	p- val ue
No	22(47. 8)	0 (0)	12 (26.1)	9 (19.6)	3(6.5)	46 (4.6)		
Yes	59 (6.1)	185 (19.3)	207 (21.7)	264 (27.7)	239 (25.1)	954 (95.4)	19.09 1	0.0 01
Total	81(8.1	185 (18.5)	219 (21.9)	273 (27.3)	242(24. 2)	1000 (100)		

Chi Square value = 19.091

p-value < 0.001

Conclusion: p value < level of significance (0.05)

Influence of teacher has shown a positive correlation with scholastic performance of children

Table 6: PROBLEMS IN SCHOOL VS SCHOLASTIC PERFORMANCE

		(Grade Percenta	ige				
Problems in school	Less than 35%	35-49%	50-59%	60-79%	80% and above	Total	Chi-Square	p-value
No	52 (83.9)	162 (87.6)	183 (83.6)	242 (88.6)	205 (78.5)	844 (84.4)		
Yes	10 (16.1)	23 (12.4)	36 (16.4)	31 (11.4)	56 (21.5)	156 (15.6)	12.073	0.017
Total	62 (6.2)	185 (18.5)	219 (21.9)	273 (27.3)	261 (26.1)	1000 (100)		

Chi Square value = 12.073

p-value < 0.017

Conclusion: p value < level of significance (0.05)

Problems in school such as harassment, isolation. When there is problems in school, the scholastic performance of the students decreases.

Table 7: PARENTAL DISHARMONY VS SCHOLASTIC PERFORMANCE

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		G	rade Percent								
Parental disharmony	Less than 35%	35-49%	50-59%	60-79%	80% and above	Total	Chi- Square	p- value			
No	6 (75)	12 (35.3)	25 (56.8)	32 (66.7)	44 (77.2)	119 (62.3)					
Yes	2 (25)	22 (64.7)	19 (43.2)	16 (33.3)	13 (22.8)	72 (37.7)	17.443	0.002			
Total	8 (5.4)	28 (18.9)	44 (29.7)	29 (19.6)	39 (26.4)	148 (100)					

Chi Square value = 17.443

p-value < 0.002

Conclusion: p value < level of significance (0.05)

Parental disharmony and broken family has shown a negative correlation with scholastic performance of children.

Table 8: ALCOHOLISM OF FATHER VS SCHOLASTIC PERFORMANCE

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		G	rade Percent		C1 . C			
Alcoholism of father	Less than 35%	35-49%	50-59%	60-79%	80% and above	Total	Chi-Square	p-value
No	1 (12.5)	6 (17.6)	11 (25)	36 (75)	48 (84.2)	102 (53.4)		
Yes	7 (87.5)	28 (82.4)	33 (75)	12 (25)	9 (15.8)	89 (46.6)	67.849	< 0.001
Total	8 (5.4)	28 (18.9)	44 (29.7)	29 (19.6)	39 (26.4)	148 (100)		

Chi Square value = 67.849 p-value < 0.001

Conclusion: p value < level of significance (0.05)

There is a significant association between alcoholism of father and scholastic performance of children. It shows a negative influence in scholastic performance.

V. DISCUSSION

The focus of the present study is to analyse how different factors such as home related, school related, psychological, disease related, influence the scholastic performance of children. Hence this study was done across ten schools situated in Karaikal town with a sample size of 1000 students.

Gender

This study revealed that female children have better scholastic performance than male children. Among the female children, 68.3% of them have scores good to excellent (>60% Grade). The present result is comparable to the study done by Saraswati Shashidhar et al ⁹andJ. N. George et al ¹⁰

Facilitating factors at home

As determined in this study that children performance was better when there is facilitating factor such as ,separate room, separate table, electric light at home, as evidenced by 56.5% children performing in the good to excellent range as compared to 46.5% without facilitating factor at home. This is similar to the study done by Meena Siwach nee Daulta et al ¹¹, Shenoy et al ¹²

Parents help for study

60.1% of children who had mothers help, scored good to excellent grade as determined by this study. This shows mothers help had positive influence in scholastic performance of children. Mothers support in her childs education helps in the scholastic performance, which correlates with the study done by Ms Bushra Iqbal Chohan et al ¹³

Teachers influence

The present study brought out, teachers influence shows positive impact on children scholastic performance. 52.7% of children scored good to excellent grade says teachers are encouraging when compared only 25.1% of children scored good to excellent grade, who said teachers are not encouraging. This is supported by a study done by M K C Nair et al 14 , S. Paul Wright et al 15

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Broken Home

Scholastic performance of children decreased with Parental disharmony, as determined by this study. This shows that family disharmony has adverse effect on scholastic performance of children. 60% of children with parental disharmony have very poor to average grade. In our study, broken family has major negative impact on scholastic performance of children. None of the children got good to excellent grade when they were from broken family. Broken family, 63% of children have poor to very poor scholastic performance. This study is supported by M K C Nair et al ¹⁷, Thomas Babalis et al ¹⁶

Influence of Alcoholism

This study shows, when alcohol dependence is present in the family, 76.5% children scholastic performance is very poor to average. This shows alcohol abuse got negative influence on children's scholastic performance which is similar to a study done by Mc Grath CE et al ¹⁷

Visual and ENT problem

Eye problems such as refactory error, squint, stye and ENT problems such as discharge, sinusitis do not have major influence on scholastic performance of children as determined by this study which correlates with Mohamed Dirani et al ¹⁸But, Roberts JE et al ¹⁹in his study said that Children with otitis media with effusion and associated conductive hearing loss have been reported to score low in mathematics and expressive language.

VI. Conclusion

In this study various interlinked factors such as socio economic status of parents, parents help in study, home environment, teachers influence, attendance problem, broken family had major impact on children's scholastic performance.

- Well educated parents shows positive influence on academic achievements of children by:
 - 1) Helping them in studies
 - 2) Providing physical and mental health.
 - 3) Being a good role model for children.
- Teachers play a vital role in the academic performance of children. In this study 90% of children felt that teachers are encouraging, which showed positive influence on academic performance.
- Family disharmony like parental quarrel because of paternal alcoholism, broken homes showed negative influence on scholastic performance.

Suggestions

Valuable suggestions and advice can be made available by forming an association among parents, teachers, school management, educational authorities, health management.

- 1. Every effort should be made to find the cause in each child for his scholastic backwardness which should be managed through intensive individualized approach in a supportive environment.
- 2. Behavioral, emotional and psychological problems should be managed through behavior therapy and psychotherapy.
- 3. Family counseling and parental guidance are essential.
- 4. Teacher-student relationship should be strengthened.
- 5. A psychologist should be there in every educational institution to help students to maintain a sound mental health.

References

- [1]. Sukumaran TU. Poor Scholastic Performance in Children and Adolescents. Indian Pediatrics. 2011;48:597-8.
- [2]. Yuping Z. Influence of Home Environment on Children's Schooling: From Teacher's Perspective. Gansu Survey of Children and Families. 2011
- [3]. American Academy of Pediatrics. Committee on Public Education. American Academy of Pediatrics: Children, Adolescents and Television. Pediatrics 2001:107:423-426
- [4]. Lawrence AS, Vimala A. School Environment and Academic Achievement of Standard IX Students. Journal of Educational & Instructional Studies in the World. 2012; 2(3): 210-5.
- [5]. Coon H, Carey G, Fulker DW, Defries JC. Influences of School Environment on the Academic Achievement Scores of Adopted and Non -adopted Children. Intelligence. 1993; 17: 79-104.
- [6]. Screen KE. The Influence of Child-Parent and Child-Teacher relationships on the academic performance of children aged 10-12 Years. Children's Relationships and Academic Performance. 2011
- [7]. Shah H. Psychosocial aspects of academic failure in children. Health Administer. 17;34-7.
- 8]. Yi-Lung K. The impact of psychosocial factors on achievement gains between eighth and tenth grade. University of Iowa. 2011.
- [9]. Saraswati Shashidhar, Chandrika Rao and Radhakrishna Hegde. Factors Affecting Scholastic Performances of Adolescents. Indian Journal of Pediatrics 2009; 76 (5): 495-499.
- [10]. J N George, A A, S R. Scholastic Underachievement In Adolescents: A Comparative Study in Government And Private Schools and Jr. Colleges. Journal of Evolution of Medical and Dental Sciences. 2014;3(17):4548-4555
- [11]. Meena Siwach nee Daulta Impact of Home Environment on the Scholastic Achievement of Children J. Hum. Ecol. (2008): 23(1):75-77

- [12]. Shenoy J1, Kapur M. Prevalence of scholastic backwardness among children. Indian J Psychiatry. Oct 1996; 38(4):201-7.
- [13]. Bushra Iqbal Chohan, Impact of Parental Support on the Academic Performance and Self Concept of the Student .Journal of Research and reflections in Education 01/2010; 4:14-26.
- Nair MK, Paul MK, Padmamohan J. Scholastic performance of adolescents. 2003. Indian J Pediatr; 70: 629-631 [14].
- [15]. S. Paul Wright, Sandra P. Horn And William L. Sanders . Teacher And Classroom Context Effects On Student Achievement: Implications For Teacher Evaluation, Journal Of Personnel Evaluation In Education, 1997. 11: 57±67
- [16]. Amitava Raychaudhuri, Manojit Debnath, Saswata Sen and Braja Gopal Majumder. Factors Affecting Students' Academic Performance: A case study in Agartala Municipal Council Area. Bangladesh e-Journal of Sociology July 2010,. Volume 7, Number
- [17]. Babalis, T., Tsoli, K., Nikolopoulos, V. & Maniatis, P.. The Effect Of Divorce On School Performance And Behavior In School Children In Greece: An Empirical Study Of Teachers' Views. Psychology 2014, 5, 20-26.
- [18]. McGrath CE, Watson AL, Chassin L. Academic achievement in adolescent children of alcoholics. J Stud Alcohol. Jan 1999; 60(1):18-26.
- Roberts JE, Burchinal MR, Ziesel SA, Otitis Media in early childhood in relation to children's Academic Skills, Pediatrics 2002: [19]. 110:696-706

Proforma

1. Name: 2. Age: a) 10-13 years b) 14-17 years Sex: a) Male b) Femal ii) Fathers occupation: a) No Job b) Unskilled c) Skilled d) Office going e) Professional & Executive i) Literacy status of mother: a) No schooling b) Primary school c) Secondary school d) Higher secondary f) Post graduate e) Degree g) Technical h) Professional 5. Type of family: a) Nuclear b) Joint c) Broken Place of residence : a) Rural b) Urban Do you feel that your teacher is encouraging on your studies?: 7. b) No 8. a) Yes Grade obtained in last examination: a) <35% b) 35-49% c) 50-59% d) 60-79% e) > 80%10. Does anyone at home help you at study? : a) Yes b) No If Yes, i) Father iii) Siblings ii) Mother iv) Friends, Uncle, Aunt 11. Are there any factors like separate room, separate table, electric light, which facilitates studies at home? a) Yes b) No 12. Are there any factors which disturbs studies at home? a) Yes b) No If Yes, i) Alcoholism/substance abuse ii) Broken homeiii) Parental quarrels 13. Do you have any problem in attending school regularly? : a) Yes b) No If Yes, i) Personal illness ii) Family problem iii) Financial problem 14. Do you have any problems at school like partiality, harassment, isolation?:

CORRESPONDING AUTHOR

DR. PAGADPALLY SRINIVAS, 27, VELLAI PILLAIYAR KOIL ST, KOTTUCHERRY. KARAIKAL-609609. PONDICHERRY UT. sreenu77@gmail.com

a) Yes

a) Yes

: a) Yes

b) No

15. Do you have eye problems like refractory errors, squint, stye?

b) No

b) No

16. Do you have any ENT problems like pain, discharge, hearing loss, and sinusitis?