



RESEARCH ARTICLE

INFLUENCE OF INCOME LEVEL OF PARENTS ON ACADEMIC ACHIEVEMENT OF PUPILS IN PUBLIC PRIMARY SCHOOLS IN KENYA: A CASE STUDY OF KISUMU WEST SUB COUNTY

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ABSTRACT

The Government of Kenya provides trained teachers and free primary education funds for each pupil in public schools, disparities have continued to exist in academic performance in each school. Academic achievement of pupils in Kisumu West Sub County had remained low in comparison with other neighboring sub counties for the years 2011 to 2017 yet studies linking poor performance with socio economic status of parents in this particular area were limited. Between 2011 and 2014, Kisumu West's mean was 243.17; Kisumu East 256.19; Kisumu Central 278.14, Nyando 248.66 and Muhoroni 258.46. The purpose of this study was to establish the influence of parents' income level on pupils' academic achievement in public primary schools in Kisumu West Sub County. It was conceptualized in the study that pupils' academic achievement depends on socio economic status of parents. The study established that parental level of income had positive influence on pupils' academic achievement. The influence was moderate as signified by the r – value of .451 at a p -value of .000, accounting for 20% of the variation in pupils academic achievement. The study concluded that parental level of income influenced pupils academic achievement and recommended that parents should be encouraged to spend more of their income on the basic needs of their children in order to enhance their academic achievement in schools.

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INTRODUCTION

Worldwide successful learning of children is dependent on many factors. These factors include school factors, environmental factors, location of schools, teacher attitude, socio-economic status of teachers, socio-economic status of parents, parental level of education, leadership styles adopted by headteachers among others factors. Similarly, child development involves multiple interactive systems of influence and dynamic interactions between the child, the education system, and wider social contexts over time (Australian Institute of Health and Welfare, 2012). From a broader perspective, education is represented as a shared responsibility between parents, educators, governments and others, rather than being the exclusive domain of schools. Socio economic status of parents is vital for pupils' academic achievement since children look up-to their parents for guidance, protection and motivation to live a great life (Ntitika, 2014). Many contemporary educationists argued that children brought up in less favorable conditions obtain less education, despite the large financial returns attributed to schooling (Heckman & Masterov, 2005).

Indeed there is a high large correlation between the education level of parents and their children (Björklund & Salvanes, 2011). De Lange, Dronkers, and Maarten (2014) investigated the influence of single family parent forms on children's educational performance among secondary school students from European countries using Organization for Economic Co-operation and Development. The study revealed that there is influence of form of family on educational performance: Students living in single-mother families' score nearly 14 points lower than students living with a mother and father, while those living with a mother plus guardian score on average 10 points lower. On the other hand, Abudu and Fuseini (2013) examined the influence of single parenting on pupils' academic performance with a focus on whether academic performance differed between child from single parents home and those from two parent homes. Data analysis involved using cross tabulation and t – test. The results showed that there is a significant difference between the academic performance of pupils from single parent homes and those from two parent homes. The main conclusion drawn from this study is that single parenting has negative impact on a child's academic performance. However, both studies did not focus on how

other aspects of marital status (like being widowed, separated, or divorced) other than single parents influence academic achievement. Moreover, the gender of the single parent could also influence academic achievement of the child. The current study assessed the influence of various aspects of socio economic status of parents on pupils' academic achievement. Dahl and Lochner (2012) used data from the National Longitudinal Survey of Youth and the main National Longitudinal Survey of Youth sample of mothers to assess the impact of family income on child achievement over the last two consecutive years. The sample size composed of 4,412 interviewed children born to 2,401 interviewed mothers. Achievement was measured through scholastic performance in math and reading based on standardized scores on Peabody Individual Tests. It was found that a \$1,000 increase in income raises combined math and reading test scores by 6 percent of a standard deviation in the short run. Test gains are larger for children from disadvantaged families and robust to a variety of alternative specifications. On the other hand, Lacour and Tissington (2011) reviewed multiple studies by the U.S. Department of Education to assess the effect of poverty on academic achievement of students. The focus was on third through fifth grade students from 71 high-poverty schools. Their findings confirmed results from similar individual studies in the U.S., that: students scored below norms in all years and grades tested; students who lived in poverty scored significantly worse than other students; schools with the highest percentages of poor students scored significantly worse. The two studies, however, have not indicated how particular income level of parents is able to affect pupils' academic performance; that is, indicators of academic achievement that can be influenced by specific income levels. The current study sought to appropriately bridge this gap through a survey in Kisumu West Sub County.

Research Objective

The research objective was: To establish the influence of income level of parents on academic achievement of pupils in primary schools from Kisumu West Sub County

Synthesis of literature on the influence of parental level of income on pupil's academic achievement: Several studies have also related pupils' academic achievement with income levels of parents. Lacour and Tissington (2011) reviewed multiple studies by the U.S. Department of Education to assess the effect of poverty on academic achievement of students. The focus was on third through fifth grade students from 71 high-poverty schools. Their findings confirmed results from similar individual studies in the U.S., that: students scored below norms in all years and grades tested; students who lived in poverty scored significantly worse than other students; schools with the highest percentages of poor students scored significantly worse initially, but closed the gap slightly as time progressed. Osuafor and Okonkwo (2013) sought to find out how family background of students in Anambra State, Nigeria influences their academic achievement in senior secondary school Biology. A survey design was adopted for the study. Five hundred and forty-six Senior Secondary Two biology students were drawn by simple random sampling from 14 schools within Awka, Nnewi and Onitsha Education Zones, in Anambra State. Three research questions and four hypotheses guided the study. Data were collected using a researcher constructed questionnaire and students' Senior Secondary one and Senior Secondary Two school results. The results revealed

that family structure, parents' occupation and educational level of parents, did not have significant influence on students' achievement. Macharia (2014) sought to investigate the parental influence on academic performance in public primary schools in Nakuru North District. Specifically, the study aimed to establish parental roles, parental economic factors, cultural practices and parental background influencing academic performance in public primary schools in Nakuru North District. A descriptive survey was used in the study. The target population was 40 public primary schools. A sample size of 10 head teachers, 40 teachers, and 140 class 8 pupils were used for questionnaire administration. It was found that there are parental roles which affect the academic performance of pupils. Also, economic factors and cultural practices among parents adversely affect academic performance. Parental background also affects pupils' academic performance. In conclusion, parental roles like meeting attendance, disciplining pupils, control of absenteeism, cultivation of respect for teachers and parents being role models have not been played well by parents. These affect academic performance of pupils. Economic factors like ability to pay fees, ability to supplement reading materials by parents, presence of child labour at home and provision of basic needs to pupils affect academic performance. Cultural practices like female genital mutilation, early marriages and attitude towards, and the background of parents also affects the academic performance. However, graded parental income has not been focused on, and compared with academic achievement of pupils in public primary schools, as is evident from the above reviewed studies. Further, the above studies had not indicated how particular income level of parents affected pupils' academic performance particularly Kisumu West Sub county which was the knowledge gap this study sought to fill.

Conceptual Framework

The conceptual framework (Figure 1) postulates income level of parents as the independent variable and pupils' academic achievement as the dependent variable. The intervening variable are confounding factors.

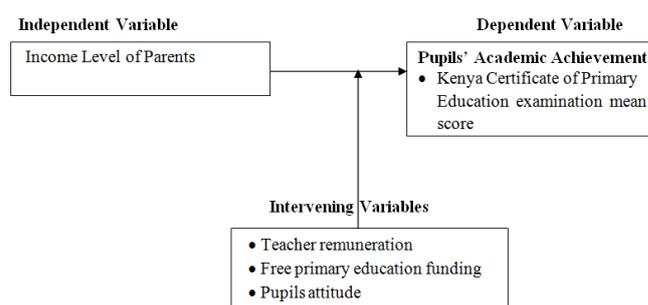


Figure 1. Influence of Parental Level of Income on Pupils Academic achievement

The conceptual framework Figure 1 presents a hypothetical link between the income level of parents and pupils academic achievement such that increase in parental level of income would lead to improvement pupils academic achievement. This is because the income may be used to cater for the basic needs of the pupils thereby enhancing their academic achievement. The basic needs include extra instructional materials, namely, approved textbooks, geometrical sets and other relevant materials. On the other hand if the parental level of income is low, that is less income is invested in the children's education

then the influence will be low and would result in lower pupil academic achievement. The intervening variables are confounding factors in that they influence the influence of parental level of income on pupils academic achievement. Thus, they are confounding in nature. This intervening variables were controlled through random sampling such that factors that enhance the influence of parental income and variables that reduce the influence of parental income neutralize each other so that what was actualized was the real influence of parental level of income on pupils academic achievement.

RESEARCH METHODOLOGY

Descriptive survey research designs were adopted for the study. Target population was 50 head teachers, 53 class 8 teachers, and 2340 parents whose children were enrolled in class 8 for Kenya Certificate of Primary Education in 2016. Through Yamane's formula, a sample size of 44 head teachers and 46 class 8 teachers was selected. Random sampling was used to select 40 parents.

a coefficient of .78 and teachers questionnaire was .83 at p-value of .05. Validity was determined by experts from educational management and foundations. Quantitative data was analyzed by use of frequency counts, means, percentages, and regression analysis. Qualitative data was transcribed and analyzed in emergent themes and sub themes.

RESULTS

Demographic Characteristics of Head Teachers and Teachers: The demographic characteristics of head teachers and teachers were gender, age, marital status, and education level of the sampled head teachers and teachers. Table 1 presents demographic characteristics of head teachers and teachers. Table 1 illustrates that 63.64% of the sampled head teachers were males while 36.36% were females. This means that most public primary schools are headed by male persons, although there are a significant number of institutions headed by female persons. This factor could be attributed to the absence of women in leadership positions that have become common all over the world (Sabatier, 2015) With regard to the

Table 1. Demographic Characteristics of Headteachers and Teachers

Demographic Characteristics		Frequency	Percentage	
Gender	Headteachers	Male	28	63.64
		Female	16	36.36
	Total	44	100	
	Teachers	Male	24	54.55
		Female	20	45.45
	Total	44	100	
Age	Headteachers	25 – 30	00	00
		31 – 35	00	00
		36 – 40	5	11.36
		41 – 45	7	15.91
		46 – 50	14	31.82
		51 – 55	16	36.36
	>55	2	04.55	
	Total	44	100	
	Teachers	25 – 30	3	6.82
		31 – 35	11	25
		36 – 40	14	31.82
		41 – 45	8	18.18
		46 – 50	5	11.36
		51 – 55	2	04.55
		>55	1	2.27
Total		44	100	
Marital Status		Headteachers	Single	02
	Married		36	81.81
	Widowed		04	9.09
	Separated		02	4.55
	Total	44	100	
	Teachers	Single	13	29.55
		Married	23	52.27
		Widowed	04	9.09
		Separated	04	9.09
		Total	44	100
Education level		Headteachers	P1	12
	Diploma		17	38.64
	Degree		15	34.09
	Total	44	100	
	Teachers	P1	16	36.36
		Diploma	9	20.45
		Degree	19	43.18
	Total	44	100	

Questionnaire was used on head teachers and class 8 teachers, while interview schedule was used on parents whose children were in class 8. Reliability of the instruments was determined by test re-test method whereby head teachers questionnaire had

sampled class eight teachers; Table 1 indicates that 54.55% were males while 45.45% of them were females. Concerning age distribution, Table 1 illustrates that 36.36% of the sampled head teachers were between 51 and 55 years old; 31.82% were

between 46 and 50 years; 15.91% were between 41 and 45 years; 11.36% were between 36 and 40; and 4.55% were aged 55 years and above. Table 1 also indicates that 31.82% of the sampled teachers were between 36 and 40 years of age; 25% were between 31 and 35 years of age; 18.18% were between 41 and 45 years; 11.36% were between 46 and 50 years; 6.82% were between 25 and 30, while another 4.55% were between 51 and 55 years. The remaining 2.27% of the sampled teachers were 55 years and above by age. This indicates that only 25% of the teachers were less than 35 years of age. With regard to marital status, Table 1 indicates that majorities (81.81%) of the sampled head teachers were married; 9.09% were widowed; 4.55% were separated; and another 4.55 of the head teachers were single. These findings mean that most of the head teachers lived or are still living as couple. This therefore means that the school administrators were better placed to assess and respond to issues concerning families within varied households, such as socio economic factors that might interfere with the academic achievement of learners.

primary schools from Kisumu West Sub County? In this considering estimated amount of money per household that was used to educate the child and therefore this ranged from Headteachers starting from 3000-50000, Kenya Certificate of secondary education examinations 7000 -75000, Certificate 15000 -85,000 Diploma 25000 -90000, Bachelor's Degree 35000 -100000, Masters 55000 -120,000 and PhD 75,000 - 199,000. The influence parental level of income on pupils academic achievement was computed and regression analysis done. The computed results were as shown in Table 2. Table 3 indicates that parental level of income is a significant predictor of academic achievement of pupils ($F(1, 306) = 77.978$, $P < .05$). Therefore parental level of income can be relied upon to explain the variation in pupils' academic achievement. The significance level of .000 implies that parental level of income can be used to predict academic achievement of pupils. The actual prediction of the influence of parental level of income on pupils' academic achievement was computed through linear regression analysis (Table 4.9).

Table 2. Influence of Parental Level of Income on pupils Academic Achievement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.451	.203	.200	52.835	.203	77.978	1	306	.000

Predictors: (Constant), Parental level of Income.

Table 3. Analysis of Variance of the influence of Parental Income Level on pupil's academic achievement

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	217679.375	1	217679.375	77.978	.000
	Residual	854216.323	306	2791.557		
	Total	1071895.698	307			

Dependent Variable: Pupils' academic achievement.

Predictors: (Constant), Parental level of income.

Table 4. Linear Regression Analysis on influence of income level of parents on pupils' academic achievement

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	217.786	8.048		27.062	.000
	Income Level	51.390	5.820	.451	8.831	.000

Dependent Variable; Pupils academic achievement. Regression Equation: $Y = \beta_0 + \beta_1 X_1 + \epsilon$

Table 1 also indicates that majority of the sampled class eight teachers (52.27%) of the sampled class eight teachers were married; 29.55% single; 9.09% widowed while another 9.09% of the sampled teachers were separated. Lastly, Table 1 illustrates that 38.64% of the head teachers had diploma level of education; 34.09% of them had degree level of education; while 27.27% had P1 level of education. This indicates a fair level of academic qualification among the sampled school administrators. This therefore means that the head teachers were in a better position to understand issues related to socio economic factors that may affect pupils' academic achievement. For class eight teachers, the table shows that 43.18% of them had degree level teachers had diploma level of education. With over 56% of class eight teachers holding diploma and degree levels of education, the respondents were expected to have adequate understanding of pupils' responses to class instructions and relate the same to home environment where the child comes from.

Research Question

The research question responded was: What is the influence of income level of parents on academic achievement of pupils in

Table 4 indicates that for everyone unit increase in parental level of income, there was 51.390, units increase in pupils' academic achievement. The regression model is therefore presented as: Pupils Academic achievement = $217.786 + 51.390X_1$

DISCUSSION

Parents with good occupation type results in better support for the learner, this is because these occupations are commensurate with high pay and when engaged their children can have high academic achievement. Similarly, some parents engage in lowly paying occupation types that make them incapable of supporting the education of their children in terms of paying school levies which leads to absenteeism of pupils from school and may ultimately lead to low influence on pupils' academic achievement. It also emerged from the interviews that were conducted with the parents that parental level of income can only help in enhancing academic achievement of the child if part of the income is dedicated appropriately towards education needs of the child. This includes purchasing of the necessary learning materials, paying school levies in time, and providing adequate food to the pupil,

among others. Without the aforementioned practices, pupils' academic achievement may not be improved like was stated by a parent "most of us parents expect teachers to provide quality teaching to our children, and we entirely rely on them to provide both teaching and learning materials to our children." This finding tends to suggest that some parents do not commit part of their income to purchasing learning materials for their children other than relying on what is provided by the school. However, most parents stated that they often ensure that all the school levies required are paid, like was stated by one parent "often strive to ensure that all the required school levies for my child are paid, even if it means at a later date." This finding implies that a child may take some time without attending school before the parent pays the expected school levies. This probably indicates that payment of school levies is not given the expected priority by some parents. Another parent stated, "I normally work for longer hours without getting much time to guide my child during home work so that I may be in a position to provide food and other basic needs for the upkeep of the family".

This revelation points at the neglect that monitoring of the pupils' academic achievement has suffered due to the pursuit for more income for the family. Families seem to place academic progress of children secondary compared to pursuit of income. The finding that the parental level of income does not influence academic achievement of pupils the family to a large extent concurs with Lacour and Tissington's (2011) who found that although students who lived in poverty scored significantly worse than other students, this gap is slightly closed as time progressed. It is therefore emerging that increase in parental level of income only increases academic achievement of pupils in the short term, but not in the long term. Dahl and Lochner (2012) established a similar finding: that a \$1,000 increase in income raises combined Mathematics and reading test scores by 6 percent in the short run, and that test gains are larger for children from disadvantaged families and robust to a variety of alternative specifications. This can be attributed to by the fact that pupils from parents who earn high level of income have all the necessary reading materials, good medical care, their school levies paid in time, they are also well motivated and had conducive learning environment back at home, which pupils from parents with low level of income lacked. All these led to disparities in academic achievement among pupils from varied backgrounds of parental level of income.

Conclusion

Parental level of income significantly influenced pupils' academic achievement in the Kenya Certificate of Primary Education examinations. This means that improvement in parents income resulted in increase in pupils academic achievement. This is attributed to the fact that parents provide essential academic prerequisite for improved academic performance of pupils.

Recommendations

In view of the findings that parental level of income accounted for 20% variation in pupils academic achievement the study recommended that, parents be advised by the teachers and head teachers to invest more in their children's education by using their income to provide promptly the education resources required by their children so that academic performance

improved. This is because it is normally the desire of pupils, parents and other stakeholders in education to have better performance in national examination.

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