

PARENTAL EDUCATIONAL LEVEL AND PUPILS' ACADEMIC PERFORMANCE IN PUBLIC PRIMARY SCHOOLS IN ENDEBESS SUB COUNTY, KENYA

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Abstract

Thus, the purpose of the study was to assess the influence of parental educational level on pupils' academic performance in public primary schools in Endebess Sub County, Kenya; establish the influence of family size on pupils' academic performance in public primary. It adopted a descriptive survey research design, with a target population of 3,072 individuals including all 47 head teachers, 705 teachers, and 2,320 class 8 students. The sample size of 246 participants was determined using the Krejcie & Morgan table (1970). The researcher collected data using questionnaires and interview guides. The instruments were validated by the experts in the area of study. Reliability of the instruments was established, and Cronbach's alpha coefficient was 0.78, indicating the instruments were reliable. Quantitative data was analyzed using descriptive and inferential statistics and presented in tables, while qualitative data analyzed in themes and sub themes and presented using quotations. The study established that parental educational levels influence academic performance in public primary schools. It was therefore recommended that there should be a consideration of home-based management dynamics like parental educational level as they determine pupils' academic performance in public primary schools. The information provided by this study will benefit policymakers, community members and academicians.

Keywords: parental educational level, pupils' academic performance, public primary schools

INTRODUCTION

Numerous studies have underscored the significance of establishing strong connections between the home and school (Parveen, Noor-UL-Amin, & Nazir, 2013). Parents' education is such a motivating force for a child which paves the way for his/her future. It is an admitted fact that the children of educated parents are more confident, resourceful, and experienced than the children whose parents lack education. The primary responsibility of parents is to ensure their children's school attendance and completion of assignments (Threlfall, M., Seay, & Kohl, 2013). However, as noted by these researchers, many parents lack formal education and are illiterate in basic subjects such as math, reading, and writing (Hafiz, Tehsin, Malik, Muhammad, & Muhammad, 2013).

Azhar, Nadeem, Naz, Perveen and Sameen (2014) conducted a study on the ways in which student's academic achievements are affected by parental education and their socio-economic status. Participants were 250 students taken from randomly selected departments and research findings are to be generalized to the University of Sargodha students. Students were selected from M.A 3rd level with the demographic information of gender, role no and department. Data is collected from participants through a questionnaire which contains three basic variables. Parental education and Socio-economic status are independent variables and student's achievement is dependent variable. Analysis of data indicates that students belonging to strong financial status perform better than those who face problems in finance. Similarly, parental education boosts their children's performance.

Chevalier, Harmon, Sullivan and Walker (2013) indicated a connection between parental education and children's academic success, emphasizing that this impact might differ based on gender. Unlike the study that explored the influence of parental education on both male and female children within the same household, the current investigation will not focus on gender disparities. Instead, it will analyze the educational outcomes of all learners. McLachlan et al. (2013) suggested that a higher level of parental education and stable income positively correlate with children's educational advantage over peers whose parents have lower income, limited education, or semi-literacy. They argued that well-educated parents are more likely to provide an enriched educational environment, driven by their superior education and financial stability.

Limoncelli (2014) conducted research that highlighted the commitment of highly educated parents toward their children's education, both in terms of time and financial resources. The study revealed a link between family income and academic achievements. Consequently, parents with higher educational backgrounds often possess the means to invest in resources like expensive private tuition, teaching materials, and other educational aids. While this study sheds light on these connections, there remains a gap in understanding the influence of parental education on their children's academic performance. Parents who possess higher education than their children may recognize the value of providing intellectually stimulating activities, serving as a significant motivator. The educational achievements of students are substantially influenced by the educational involvement of parents, reflecting the wider significance of parental engagement in educational success (Henderson, MacPherson, Osborne, & Wild, 2015).

Rana (2015) conducted research exploring the correlation between parental education levels and their children's educational achievements in a town in South Punjab, Pakistan. The outcomes demonstrated a strong positive association between parents' educational attainment and their children's intellectual success. Azhar (2014) conducted a Norwegian study investigating the impact of parental educational backgrounds on their children's educational progress. The study revealed a positive correlation between parents' educational levels and their children's academic success. The academic achievements of students are closely intertwined with the educational attainment of their parents. Educated parents are more likely to be engaged in their child's education, including assisting with homework. Regardless of the setting, educated parents tend to invest in extra stationery and school supplies to enhance the learning environment and performance. Children with parents who have low educational aspirations may face challenges in terms of school readiness (Muola, 2014).

Asad, Nadeem and Saima (2015) conducted a study on the influence and impact of parents' educational level on students' academic achievement at secondary level of education. The study utilizes the students results of the 9th class in secondary school certificate examination taken by the Board of Intermediate & Secondary Education Dera Ghazi Khan. The study found out the impact of parental education status on students' academic achievements at secondary school level. The research population was the students of different public and private high schools of District Rajanpur, South Punjab. 200 students of Grade 10th were taken as a sample randomly. After analysis of the data the research finds a significant positive relationship between parents' education level and academic achievements of students. Davis-Kean (2015) concluded that parental beliefs, education levels, and salaries significantly predicted academic achievements. Studies investigating the correlation between mothers' educational attainment and students' performance found that the mother's education had a more substantial impact on academic success than the fathers. However, these studies were conducted in Western nations, leaving a knowledge gap concerning the influence of household characteristics in the suggested location (Magnuson, 2017).

Methodology

As stated by Bryman and Bell (2012), a research design represents a comprehensive strategy employed by researchers to integrate various study components in a coherent and logical manner. This approach ensured that these components effectively address the analytical question at hand. It functions as the foundation for the collection, evaluation, and analysis of data. Consequently, the research adopted a descriptive survey design along with an appropriate research method, which was ideally suited for the study's objective of gathering both quantitative and qualitative field-based data.

The chosen research design played a pivotal role as it enabled the researcher to explore the influence of parental income, parental education level, and family size on academic performance in public primary schools. The study focused on investigating the behaviours, attitudes, opinions, perceptions, and characteristics of stakeholders within the sub county. This design facilitated an examination of how these factors historically affected academic performance. By employing a research design with a descriptive survey approach, the study was able to effectively capture the multifaceted nature of the relationships between home-based management dynamics and academic outcomes in the public primary schools of the designated sub county.

This study was conducted in Endebess Sub-County of Trans-Nzoia County, which shares boundaries with Kwana Sub-County to the east, Mt. Elgon Forest and National Park to the west, Saboti Constituency to the south, in addition to Uganda and West Pokot to the north. Almost all of Kenya’s ethnic groups are represented in the sub-county, rendering it cosmopolitan. Mixed farming, comprising both crop cultivation and cattle rearing, stands as the primary economic activity.

The selection of the study location was grounded in its compelling significance and relevance. Data retrieved from the sub-county director of education office had indicated a substantial link between home-based dynamics and the prevalent issues of high student absenteeism and poor academic achievement within public primary schools (Ministry of Education, 2022). This empirical evidence underscored the urgency to comprehensively investigate the effects of home-based management dynamics on academic achievement. The Ministry of Education’s insights provided a foundational rationale for focusing the study on this specific geographic area.

A target population, according to Babbie (2015), consists of all factors that a study or experiment aims to consider. Mugenda (2011), who claims that a population consists of elements for which study data should be applied to create generalizations, supports this claim. Therefore, the focus of this study was directed towards all 47 head teachers, 705 teachers, and 2,320 class 8 students, thus constituting a total of 3,072 individuals. The entire target population was ascertained, as exemplified in the table presented below (Table 1).

Table 1: Target population

Category	Target Population
Head teachers	47
Teachers	705
Class 8 learners	2,320
Total	3072

A sample subsists as apportion of a population that has been, selected for observation and investigation, according to Best and Kahn (2011). According to Kothari (2011), sampling is a technique for getting respondents who are an appropriate sample of the greater research population. The research employed the methodology outlined by Krejcie and Morgan (1970) to calculate the sample size for the study. Utilizing their approach, the table indicated that a population of 3,072 would correspond to a sample size of 246 respondents. As a result, the sample distribution consisted of 4 head teachers, 56 teachers, and 186 class 8 students. The sampling technique employed was simple random sampling, ensuring the selection of 246 participants for the research.

Table 3: Sample Frame

Respondents’ category	Population size	$n_i = (N_i \times n)/N$	Sample size
Head teachers	47	$(47 \times 246) / 3072$	4
Teachers	705	$(705 \times 246) / 3072$	56
Class 8 learners	2320	$(2320 \times 246) / 3072$	186
Total	3072	$(3072 \times 246) / 3072$	246

A tool utilized to measure one or more study variables is, referred to as a research instrument (Mugenda, 2011). Interview schedules and questionnaires were, utilized in this study.

The researcher gathered information from the respondents using closed-ended questions. The questionnaires proved to be practical for larger populations and facilitated swift data collection for the project. Respondents were afforded the freedom to express their opinions, ideas, and suggestions within the surveys. Furthermore, the survey ensured anonymity, enabling participants to provide responses with heightened honesty. This anonymity promoted more candid responses. Closed-ended questions required respondents to select the most appropriate option from a provided set of choices. The questionnaire was distributed to Class 8 pupils and teachers. The interviewer utilized a list of questions outlined in the interview guide to elicit responses from senior management representatives during the interviews. The use of an interview guide facilitated the collection of information that was necessary to meet specific study objectives but could not be obtained through other tools, such as questionnaires. Interview guide was used to collect data from Head Teachers.

To produce valuable results, research instruments must be trustworthy and authentic, as asserted by Mugenda (2003). Research instruments are considered dependable when they accurately record the intended data. To establish content and

bolster credibility, the instruments should be provided to experts who can assess whether they accurately represent the anticipated findings (Silverman, 2015). To assess the validity of the study instruments, experts in the area of study appraised whether the items were intelligible and had the ability to provide relevant data. As stated by Powell and Silipigni (2004), dependability refers to the range of outcomes that a test or analysis procedure consistently generates under the same circumstances on every occasion. Thus, repeatability essentially encompasses what reliability entails. The reliability of the questionnaire was assessed using Cronbach's alpha. The analysis of variance technique was employed to assess the overall dependability of the measure. According to Saunders et al. (2007), Cronbach's alpha statistic was used to evaluate the consistency of responses to a series of questions (scale items) designed to collectively assess a single concept. Readings on the Cronbach's alpha, measuring internal consistency, were used to determine the reliability of the data gathering instruments. Readings above 0.7 were regarded as trustworthy. The reliability of the validated questionnaire's Cronbach's alpha coefficient was 0.78, indicating the instrument were reliable.

A pilot study is a small-scale preliminary investigation conducted before the main research to assess the feasibility, reliability, and validity of research methods and instruments (Yin,2014). It helps researchers identify and rectify potential issues, refine research procedures, and ensure the smooth execution of the actual study. In this case, the pilot study allowed the researcher to test the research instruments and make necessary adjustments before implementing them in the main study. Gay (1992) and Orodho (2008) contend that piloting gives the researcher the opportunity to address any misunderstandings found in the research instruments.

The practice of turning gathered unprocessed data into valuable knowledge is, known as data analysis (Kombo and Tromp, 2006). Data was gathered, modified, and subjected to both quantitative and qualitative analysis. The analysis of qualitative data considered conclusions drawn from respondents' opinions. Qualitative data analysis involved categorizing the data based on themes and related elements. Descriptive statistics, including frequency tables and percentages, were utilized to examine and tabulate quantitative data. Data analysis and table display were facilitated by the 26th edition of the Statistical Package for Social Science (SPSS).

The confidentiality of respondents was consistently respected. Instead of focusing on respondents' potential limitations, the researcher directed attention towards managing their own challenges, such as competency. The researcher's commitment to maintaining professional distance was pivotal, especially when information was submitted verbally or in writing, which was used solely for academic purposes.

Results

The study adopted descriptive and inferential statistical analysis. This helped to analyze the influence of parental educational level on pupils' academic performance in public primary schools in Endebebb Sub County, Kenya. For analysis, descriptive statistics (frequency, percentage, and mean distribution) for the level of agreement on a five-point Likert scale of the variable, parental educational level was analyzed and summarized in Table 3.

Table 3: Descriptive statistics for parental educational level and pupils' academic performance in public primary schools

Statements	SD	D	U	A	SA	MEAN
Mother's education has more substantial impact on their pupils' academic success than the fathers	F 13 % 5.8	33 14.7	10 4.5	93 41.5	75 33.5	3.82
Highly educated parents often invest in private tuition, teaching materials, and other educational aids for their pupils, hence, improved academic performance	F 11 % 4.9	8 3.6	24 10.7	72 32.1	109 48.7	4.16
Highly educated parents assist their pupils with homework, thus, improved academic performance	F 6 % 2.7	5 2.2	21 9.4	131 58.5	61 27.2	4.05
Highly educated parents provide an enriched educational environment for their pupils, hence, improved academic performance	F 5 % 2.2	22 9.8	8 3.6	90 40.2	99 44.2	4.14

Table 3 shows that 93(41.5%) of the respondents strongly agreed with the statement that mother's education had more substantial impact on their pupils' academic success than the father's, 75(33.5%) agreed, 33(14.7%) disagreed, 13(5.8%) strongly disagreed and 10(4.5%) were undecided on the statement. The study findings suggested that the respondents tended to agree (Mean=3.82) that mother's education had more substantial impact on their pupils' academic success than the fathers. This was supported by an interviewee who had the following to say;

"... Compared to fathers, mothers of higher educational levels have greater success in providing their children with the skills they need to be successful in an academic setting. They transfer the value of education to their children which in turn affect the aspiration level and achievement of the pupil..." Male Participant, 56 years, School Head Teacher.

This implies that mother's education has more substantial impact on their pupils' academic success than the father's. This supports the finding of Davis-Kean (2015) that the mother's education had a more substantial impact on academic success than the fathers.

Additionally, 109 (48.7%) of the respondents strongly agreed with the statement that highly educated parents often invested in expensive private tuition, teaching materials, and other educational aids for their pupils, hence, improved academic performance, 72(32.1%) agreed, 24(10.7%) were undecided, 11(4.9%) strongly disagreed and 8(3.6%) disagreed with the statement. It emerged from the study that the respondents tended to agree (Mean=3.82) that highly educated parents often invested in expensive private tuition, teaching materials, and other educational aids for their pupils, hence, improved academic performance. This implies that highly educated parents often invest in resources like expensive private tuition, teaching materials, and other educational aids for their pupils, hence improved academic performance. This is in line with the findings of Limoncelli (2014) that parents with higher educational backgrounds often possess the means to invest in resources like expensive private tuition, teaching materials, and other educational aids.

Similarly, 131(58.5%) of the respondents agreed with the statement that that highly educated parents assisted their pupils with homework, thus, improved academic performance, 61(27.2%) strongly agreed, 21(9.4%) were undecided, 6(2.7%) strongly disagreed and 5(2.2%) disagreed with the statement. The study findings suggested that the respondents agreed (Mean=4.05) that highly educated parents assisted their pupils with homework, thus improving academic performance. This was supported by an interviewee who had the following to say;

“... High level educated parents usually show interest and care in their children’s academic performance or achievements. Pupils of educated parents are provided with better learning conditions at home. Parents teach their children themselves...” Female Participant, 51 years, School Head Teacher

This implies that highly educated parents assist their pupils with homework, thus improving academic performance. This is in line with the findings of Rana (2015) that Educated parents are more likely to be engaged in their child’s education, including assisting with homework.

Lastly, 99(44.2%) of the respondents strongly agreed with the statement that highly educated parents provided an enriched educational environment for their pupils, hence, improved academic performance, 90(40.2%) agreed, 22(9.8%) disagreed, 8(3.6%) were undecided and 5(2.2%) strongly disagreed with the statement. It emerged from the study that the respondents agreed (Mean=4.14) that highly educated parents provided an enriched educational environment for their pupils, hence, improved academic performance. This implies that educated parents provide an enriched educational environment, hence, improved academic performance for the pupils. This agrees with the findings of McLachlan et al. (2013) that well-educated parents are more likely to provide an enriched educational environment, driven by their superior education.

These descriptive statistics of objective two were followed by a Chi-square test of association. The Chi-square test at $p \leq 0.05$ significance level illustrating statistically significant association between parental educational level and pupils’ academic performance in public primary schools in Endebess Sub County, Kenya is as summarized in Table 8. To achieve this, the hypothesis below was tested.

H₀₂: *There is no significant association between parental educational level and pupils’ academic performance in public primary schools in Endebess Sub County, Kenya.*

Table 4: Chi-square test of association between parental educational level and pupils’ academic performance in public primary schools

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1326.950 ^a	156	.000
Likelihood Ratio	506.245	156	.000
Linear-by-Linear Association	158.345	1	.000
N of Valid Cases	224		

a. 176 cells (96.7%) have expected count less than 5. The minimum expected count is .01.

Table 4 shows that the p value ($p=0.000$) for parental educational level was less than 0.05. Hence, the hypothesis, “there is no significant association between parental educational level and pupils’ academic performance in public primary schools in Endebess Sub County, Kenya” was rejected. This implies that there is statistically significant association between parental educational level and pupils’ academic performance in public primary schools in Endebess Sub County, Kenya.

Conclusion

The study findings suggested that the respondents tended to agree that mother’s education had more substantial impact on their pupils’ academic success than the fathers. Additionally, it emerged from the study that the respondents tended to agree that highly educated parents often invested in expensive private tuition, teaching materials, and other educational aids for their pupils, hence, improved academic performance. Similarly, the study findings suggested that the respondents agreed that highly educated parents assisted their pupils with homework, thus, improved academic performance. Lastly, it emerged from the study that the respondents agreed that highly educated parents provided an enriched educational environment for their pupils, hence, improved academic performance. Chi-square test of association revealed that there is statistically significant association ($p=.000$) between parental educational level and pupils’ academic performance in

public primary schools in Endebess Sub County, Kenya. Thus, it is concluded that there is a statistically significant association between parental educational level and pupils' academic performance in public primary schools.

References

- [1]. Asad, K., Nadeem, I., & Saima, T. (2015). The Influence of Parents Educational Level on Secondary School Students Academic Achievements in District Rajanpur. *Journal of Education and Practice*, 6(16).
- [2]. Azhar, M., Nadeem, S., Naz, F., Perveen, F., & Sameen, A. (2014). Impact of parental education and socio-economic status on academic achievement of University students. *European Journal of Psychological Research* .
- [3]. Babbie, E. R. (2015). *How to Conduct Social Research*. Nelson Education.
- [4]. Best, J. W., & Kahn, J. V. (2011). *Education-related research* (10th ed.). New Delhi: PHI Learning Private limited.
- [5]. Bryman, A., & Bell, E. (2015). *Methods for doing business research*:. Oxford University Press.
- [6]. Chevalier, A., Harmon, C., Sullivan, V. O., & Walker, I. (2013). How parents' education and income affect their children' education. *The Journal of Labor Economics*, 2(8), 1-22.
- [7]. Davis, D. W., Gordon, M. K., & Burns, B. M. (2011). A review and integrated model of educational interventions for preschoolers from low-income households with asthma. *Nursing in children*, 37(1), 31.
- [8]. Davis-Kean, P. E. (2015). Indirect impact of parental expectations and the home environment on children's accomplishment. *Journal of Family Psychology*, 19(2), 294-304.
- [9]. Hafiz, M. W., Tehsin, F., Malik, M. S., Muhammad, S., & Muhammad, A. K. (2013). Academic success and parental involvement: a study of Pakistani secondary school pupils in Lahore. The Special Issue for April 2013. *International Journal of Humanities and Social Science*, 3(8).
- [10]. Henderson, J. B., MacPherson, A., Osborne, J., & Wild, A. (2015). Five justifications for the use of criticism in scientific education go beyond building. *International Journal of Science Education*, 37(10), 1668-1697.
- [11]. Limoncelli, M. A. (2014). *Obstacles to girls completing their secondary education in sub-Saharan Africa, with an emphasis on Nigeria and Uganda*. American University.
- [12]. Mugenda, A. G. (2011). *Research in Social Sciences: Theories and Guidelines*. Nairobi: Applied Research & Training Services Press.
- [13]. Muola, J. (2014). study of the connection between standard eight students' drive for academic accomplishment and their family environments. *Education and Research Review*, 5(5), 213-217.
- [14]. Orodho, A. (2014). What are the financial and qualitative effects of Kenya's free primary education (FPE) and free day secondary education (FDSE) policies? *International Journal of Development Research*, 4(3), 477-487.
- [15]. Parveen, A., Noor-UL-Amin, S., & Nazir, S. (2013). A comparison of the academic performance of males in the 10th grade attending various high schools in the District of Pulwama (J&K). *Journal of Education Research and Behavioral Sciences*, 2(2), 20-27.
- [16]. Powell, R. R., & Silipigni, L. C. (2014). *Fundamental Research Techniques for Librarians*. Libraries Unlimited.
- [17]. Silverman, D. (2015). *Qualitative research methods: A Practical*. Sage publications.