

Level of parental education and pupils' academic performance in selected primary schools in Juba City, South Sudan. A cross-sectional study.

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Abstract

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Background:

The level of education has a strong influence on pupils' academic performance, shaping their understanding, skills, and learning outcomes. This study aims to determine the relationship between the level of education and pupils' academic performance in selected primary schools in Juba City, South Sudan.

Methodology:

A Stratified random sampling technique was used to select eight schools of the fifteen Schools in the city. Data was collected through three sets of questionnaires for Pupils, teachers, and head teachers. Correlation and regression analysis were used to establish the significance and relationship between the variables of the study.

Results:

66 respondents participated in this study, 38.3% of the parents had secondary education as the highest level of education, 33.3% had attained up to primary education, and 18.3% had no formal education, while 10.1% had college-level education. 22.4% of the students scored a C+ grade, 12.3% had a C-, 15.7% had a C plain, 4.4% had a B-, 35.2% had a D+, and 5.6% had a B plain. This implies that the majority of the students scored average grades. Parental educational level showed 66% of the variation in pupils' academic performance ($R^2 = .660$). Parental education level had a strong positive influence on pupils' academic performance with a Pearson correlation coefficient of 0.812 and a significant value of 0.000, which is less than 0.025, the critical value at the 5% level of significance.

Conclusion:

The study found that the performance of the pupils was higher for those pupils with parents in formal occupations than for those with parents in informal occupations.

Recommendation:

The county needs to put in place appropriate systems to enhance parental education, like adult education, so the parents can be equipped with basic formal education.

Keywords: Level of Education, Pupils' Academic Performance, Juba City, South Sudan.

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Background of the study

Globally, parents play primary roles in raising children in society to become productive citizens (Adekey, 2002). Parents' levels of education and type of occupation have a great influence on the child's success or failure. This is exemplified by Mudassir and Abubakar's (2015) study in Malaysia, where students whose parents had formal occupations performed better than those whose parents had informal occupations. Further studies in Nigeria indicate that parents with higher levels of education and formal occupations maintain positive views about the values of education, which results in higher levels of academic achievement of their children (Ford and Harris, 1997; Steinberg, 1992). The reverse is true for the parents of low socio-economic status because they earn lower incomes and often have to work longer hours to earn more for their families (Gratz, 2006). Therefore, such parents are often left with less time to spend with their families and their children's educational activities in particular. The scenario in East Africa is not an exception

as far as parents' socio-economic status is concerned. In Kenya, for instance, it is argued that children from supportive family backgrounds perform better than those from non-supportive backgrounds. Parents of different occupational classes, for example, often have different styles of child rearing, different ways of disciplining their children, and different ways of reacting to their children (Muhammed and Muhammed, 2010). These differences do not express themselves consistently as expected in the case of every family; rather, they influence the average tendencies of families for different occupational classes. On the contrary, Hill et al. (2004) argued that the socioeconomic status of parents makes it possible for children from low economic backgrounds to compete with their counterparts from high socioeconomic backgrounds under the same academic environment.

The education level of parents also plays a crucial role in shaping children's academic performance. Parents with higher levels of education are more likely to value education, create a positive learning environment at home,

and be actively involved in their children's schooling. In contrast, parents with lower levels of education may have limited knowledge of educational requirements, making it more challenging for them to support their children's academic development. This lack of support can hinder a child's ability to perform well in school, especially in subjects that require a higher level of parental engagement, such as mathematics and language arts.

Policymakers and educators in South Sudan must understand the root causes of academic underachievement among pupils from low-income families in Juba City. With this knowledge, they can design and implement programs aimed at supporting these pupils. Interventions might include providing additional learning materials, improving parental engagement in education, and creating after-school support programs. This study aims to determine the relationship between the level of education

and pupils' academic performance in selected primary schools in Juba City, South Sudan.

Methodology

Research design

This study employed a quantitative approach for data collection and a descriptive cross-sectional research design.

Target Population

The study targeted 4 head teachers, 60 teachers, 240 pupils, 1 Area Education Officer, and 144 parents.

Sampling size and selection

The total population of 499 was used in the study, out of which a sample of 207 was selected using Krejcie & Morgan's Table of 1970. As represented in Table 1;

Table 1: Sample Size

CATEGORIES RESPONDENTS	OF POPULATION(N)	SAMPLE SIZE(n)	SAMPLING TECHNIQUE
Head Teachers/school administrators	4	2	Simple random
Teachers	60	27	Simple random
Students	240	109	Simple random
Parents	144	66	Simple random
TOTAL	448	204	

Data Collection Procedure

Approval for data collection was obtained from the Juba County Education Department and the participating school administration. Informed consent was sought from all participants in the research. Questionnaires were distributed and collected over two weeks, and academic records and files were obtained with the permission of the school authorities.

Data collection methods and instruments

The study employed questionnaires as the main tool for collecting data. The tool was preferred because they are flexible to the sample category and would easily generate detailed data from the respondents.

Questionnaires

Closed-ended questions were used in this study. Self-administered questionnaires were given to teachers and pupils; they were required to read and answer the questions given.

Pretesting (validity & reliability)

To ensure the quality of the data, two quality control methods were used in this study, and these include: Validity of research instruments was achieved by ensuring that test items cover all objectives and variables of the study. Consultations and discussions with the supervisor were conducted to establish the content validity. A content validity test was conducted using the CVI, whose formula is:

$CVI = \frac{\text{Number relevant items}}{\text{Total items}} \times 100$

Total. When the CVI value becomes 70% or above, then the instruments will be valid.

Reliability

Piloting was done to test whether the research instruments clearly stated and whether they were meaningful to respondents. The Cronbach Alpha test was used to test the reliability of the research instruments.

Data analysis

According to Polit and Hungler (1997), data analysis means to organize, provide structure, and elicit meaning. The data collected was coded and tested for completeness, and then was analyzed using descriptive and inferential statistics using Statistical Package of Social Science (SPSS), and was presented using tables, charts, and graphs for easy interpretation. Chi-squares and regression analysis were used to establish the relationship between variables. These types of inferential statistics are easy to compute and interpret, and they also help in making conclusions. Descriptive statistical techniques (frequencies and percentages) will be employed to analyze field data from questionnaires to assist in the interpretation of data.

Ethical considerations

Collected data was protected by meeting the international standards, and during data analysis and report presentation, confidentiality and anonymity of the

respondent's personal identification data were secured to prevent the respondent's exposure to any other risk.

The response rate and the demographic characteristics of the study respondents are also given as a background to the analysis part. Presentations of the results are illustrated in tables and figures where appropriate.

Results

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Table 2: Questionnaire Return Rate

Respondents	Returned	%
Head teachers	8	100%
Class Teachers	27	100%
Pupils	89	86.4%
Parents	60	90.9%
Total	184	90.2%

The study was designed to draw respondents from eight public primary schools that targeted eight head teachers, class teachers, pupils, and parents. All the questionnaires issued to head teachers and class teachers were duly filled out and collected. The questionnaires collected from the students were 89. This means that there was a 100% questionnaire return rate from the head teachers and class teachers, while that of parents was 90.9%. The overall response rate was 90.2%. The researcher administered the questionnaires personally and made follow-ups to ensure the questionnaires were filled out and returned.

The response rate achieved by the study is very good according to Mugenda and Mugenda (2003), who posit that a response rate of 50% is adequate, 60 % is good, and above 70% is very good. Further, Saunders, Lewis, and Thorn (2007) suggested that an average response rate of

30 % to 40% is reasonable for a deliver and collect survey method.

Background Information of the Respondents

The researcher sought to establish background information of the respondents to arrive at a conclusive research analysis in the following areas: duration served in the school by the head teacher, pupils' entry behavior, the cut-off mark for form one entry into the schools, the number of parents who visit the head teacher's office in a term, and the school type.

Duration Served in the School by the Head Teacher

The researcher sought to find the number of years served by the head teacher in the school.

Table 3: Number of Years Served by the Head Teacher in the Current School

Years	Frequency	Percentage%
1-5	2	25
6-10	4	50
Above 10	2	25
Total	8	100

The findings were that 50% of the head teachers had served in their current school for 6 to 10 years, 25% had served for 1 to 5 years, and 25% had served for more than 10 years. The findings imply that the head teachers had adequate experience in the management of their current schools, shown by a good number of years served.

Students' Entry Behavior (Marks) to Form One

The students were asked to indicate the examination marks they were admitted with in the form.

Table 4: Examination Marks of pupils Admitted to Form One

Marks	No. of students	Percentage (%)
450 and above	0	0
400-449	0	0
350-399	3	3.3
300-349	25	28.0
250-299	38	42.6
200-249	14	15.3
199 and below	12	10.8
Total	89	100

The findings indicate that 42.6% of the students who participated in the study were admitted into form one with 250-300 marks, 28.0% were admitted with 300-349 marks, 15.3% were admitted with 200-249 marks, 10.8% were admitted with 199 marks or less, and 3.3% had 350-399 marks. There were, however, no pupils admitted with

400 marks or more. The findings imply that the schools admitted pupils with average marks at Further. All the primary schools in Juba city admit students with less than 400 marks, which explains the average performance by pupils in the city.

School Type

Table 5: Type of School Sampled

School Type	Frequency	Percentage
Mixed day	4	50
Boarding	2	25
Mixed day and boarding	2	25
Total	8	100

Table 5 indicates that 50% of the schools selected for the study were mixed day schools, 25% were purely boarding schools, and another 25% mixed day and boarding schools. The findings imply that the majority of schools in Juba city are mixed-day schools.

grades in the exam sat for in the third term in 2024, the average performance, the parents' level of commitment to their children's learning, and the level of discipline among the students. On the students' mean grades in the exam sat for in the third term in 2024, the students gave the grades shown in Table 5 based on the examination done in term three in 2024.

School Performance

The study sought to determine the students' performance in Juba City using the following aspects: students' mean

Table 6: Students' Mean Grades in the 2024 Term Three Exam

Grade	Number of Students	Percentage (%)
A-and above	0	0
B+	4	4.4
B	5	5.6
B-	4	4.4
C+	20	22.4
C	14	15.7
C-	11	12.3
D+	31	35.2
D and below	0	0
Total	89	100

The findings indicate that 22.4% of the students scored a C+ grade, 12.3% had a C-, 15.7% had a C plain, 4.4% had a B-, 35.2% had a D+, and 5.6% had a B plain. The findings imply that the majority of the students scored

average grades. The study also sought to determine from the class teachers the level of commitment by parents to their children's learning.

Table 7: Parents' Commitment Toward Their Children's Learning

Level of Commitment	Frequency	Percentage
High	5	62
Low	2	25
Very low	1	13
Total	8	100

On the parents' level of commitment to their children's learning, the findings show that the teachers indicated that 62% of parents had high commitment to their children's learning, 25% had low commitment, while 13% had very low commitment towards their children's learning. This

gives a general impression that parents in the area are committed to the learning of their children. The study further sought to determine from the head teachers the discipline among the students.

Table 8: Discipline Among Students

Level of Commitment	Frequency	Percentage
Very good	3	37.5
Good	4	50
Average	1	12.5
Below average	0	0
Total	8	100

The findings indicate that 50% of head teachers indicated the discipline was good in their schools, 37.5% indicated that the discipline was very good, and 12.5% said the discipline was average. The findings imply that the pupils in the schools in Juba city generally had good discipline.

The first objective of the study was to determine the relationship between parents' level of Education and the academic performance of pupils in Juba city schools. In order to achieve this objective, both descriptive and inferential statistical tests were conducted.

Parental Educational Level and Pupils' Academic Performance

Descriptive Statistics for Parental Educational Level

The parents were asked to state their level of education.

Table 9: Parental Educational Level

	Frequency	Percentage
No Formal Education	11	18.3
Primary Level of Education	20	33.3
Secondary Level of Education	23	38.3
College Level of Education	6	10.1
Total	60	100

Table 9 indicates that 38.3% of the parents had secondary education as the highest level of education, 33.3% had attained up to primary education, and 18.3% had no formal education, while 10.1% had college-level education. The findings imply that most parents had at least attained basic education.

Correlation between Parental Educational Level and Pupils' Academic Performance

The correlation test was conducted at the 5% level of significance with a 2-tailed test. Thus, the significance critical value was set at 0.025, above which the association is deemed to be insignificant and vice versa.

Table 10: Correlation Between Parental Educational Level and Pupils' Academic Performance

		Parental Educational Level
Students' Academic Performance	Pearson Correlation	.812**
	Sig. (2-tailed)	.000
	N	184

**. Correlation is significant at the 0.01 level_2-tailed.

The findings in Table 10 show that parental education level has a strong positive influence on pupils' academic performance with a Pearson correlation coefficient of 0.812 and a significant value of 0.000, which is less than 0.025, the critical value at the 5% level of significance. Therefore, based on the findings of the study, the study rejected the null hypothesis and hence deduced a significant connection between parents' level of education

and academic scores of children in Juba city schools. The results support the findings of Mallan (2019) and Rana (2015) that showed parental education achievement influenced children's academic performance.

The findings of the study are in line with those posited by Mallan (2019), who determined that parents' level of education is imperative to schooling, as parents need their youngsters to keep up with business as usual. It's likewise

trusted that parents with higher educational levels have more grounded trust in their children's scholastic abilities, and they additionally have higher expectations of their children. They expect that their children will gain decent evaluations, perform well in school, and go to school. These desires and trust in their kids rouse them to do well at school. The confidence parents have in their children also helps them to build their own confidence and self-concept, which is important in their education. However, the findings of the study disagree with the findings of Eccles (2015), who found that parents' overexpectations might also cause stress to their children, which translates to poor educational attainments. Eccles (2005) nevertheless agrees that children learn by example,

often through observations at home. If a child's parents are reading books, attending ongoing educational classes, and taking them along to the museums, libraries- all activities educated parents are more apt to do- they are engaging the child in several direct learning experiences that will help him or her to achieve the best in education.

Regression between Parental Educational Level and Pupils' Academic Performance

The study used regression analysis to determine the link between parents' level of education and children's performance in academic performance in Juba city.

Table 11: Model Summary for Parental Educational Level

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.812 ^a	.660	.657	.386

a. Predictors: (Constant), Parental Educational Level

The predictor variable (parental educational level) explains 66% of the variation in pupils' academic performance ($R^2 = .660$). Thus, based on this coefficient, parental levels of education greatly influence the pupils' academic performance. Other factors that were not considered in this research contributed to 34% (1-

0.660=0.340 expressed as a percentage) of the pupils' academic performance in Juba city schools, which is far less than 0.66.

The ANOVA was generated to test the significance value of reliability for the association between parental level of education and pupils' academic performance.

Table 12: ANOVA Table for Parental Educational Level

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	36.645	1	36.645	46.161	.000 ^b
1 Residual	18.906	103	.149		
Total	55.550	104			

a. Dependent Variable: pupils' Academic Performance

b. Predictors: (Constant), Parental Educational Level

The significance value in testing the reliability of the regression for the connection between parents' level of education and pupils' academic scores was obtained as 0.000, which is less than 0.05, the critical value at a 95% significance level. Therefore, the regression is statistically significant in predicting the relationship between the dependent and independent variables of the study. The study has determined that parental education status positively influences pupils' performance in Juba city. Mallan (2019) agrees with these findings when the study found that parents' levels of education have a more positive attitude towards their children's schooling and improved performance. Grissmer, Kirby, Berends, and Williamson (2014) are also in agreement with these findings when the authors determined that parental level of education is known as a factor positively related to the children's academic performance. Further, Shumox and Lomax (2021) agree with these findings by positing that the academic performance of the students heavily depends upon the parental involvement in academic activities to attain a higher level of quality in academic success.

Discussion

Parental Education and Pupils' Academic Performance

The findings of the study revealed that the majority of parents in Juba city had attained secondary education as their highest level of education, and that pupils whose parents had higher levels of education generally performed better academically than those from less educated families. This suggests that parental education plays a crucial role in influencing children's academic performance, as more educated parents are likely to value education, create a conducive home learning environment, and provide direct academic support, such as helping with homework and monitoring progress. The significant positive correlation found between parents' education and pupils' performance aligns with the argument that parental education enhances a child's access to educational resources, intellectual stimulation, and positive attitudes toward schooling. These findings are consistent with previous studies conducted in different contexts. For example, Namukose and Sendagi (2024) in Uganda found that parents' education significantly influenced pupils'

academic performance through parental involvement and educational guidance, while Kahunzire et al. (2023) reported that learners with highly involved and educated parents performed better than those whose parents had little or no formal education. Similarly, Misiko, Kirwok, and Kikechi (2023) in Kenya discovered that parental educational attainment positively influenced pupils' performance in public primary schools, and Shoaga and Rasheed (2024) in Nigeria found that parents' educational background and involvement were significant predictors of academic success. However, a study in Butagaya Sub-County, Uganda, found no significant relationship between parents' education and pupils' performance, suggesting that in some contexts, economic factors may outweigh educational background. Despite this exception, the overall evidence supports the view that higher parental education contributes to improved academic achievement among pupils, largely because educated parents understand the value of schooling, set high expectations, and provide the necessary academic and emotional support.

Conclusion

The study found that there was a significant positive influence of parents' education on pupils' academic performance in Juba city. The study therefore concluded that the more the parents were educated, the higher their children's performance. The study found that the performance of the pupils was higher for those pupils with parents in formal occupations than for those with parents in informal occupations. The study therefore concluded that pupils whose parents were in formal employment exhibited higher academic performance than those whose parents were in informal employment.

Recommendation

From the study, most of the parents in the area had little education, and this frustrated their efforts in the involvement of their children's education. In light of this, the study recommends that the county needs to put in place appropriate systems to enhance parental education, like adult education, so the parents can be equipped with basic formal education.

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My dedicated lecturers, I dedicate this research to thank you for supporting me throughout my academic Journey and giving me knowledge, offering guidance, and shaping my academic foundation with patience and professionalism. I recognize you. My workmates' encouragement to push on, support in issues challenging, understanding where I felt short of wisdom, and cooperation during my double work shift made it possible for me to balance work and study effectively. The pupils, teachers, and Parents of Juba primary schools, your cooperation during the data and information collection is highly appreciated. Your resilience and potential will continue to inspire this research. May this study contribute in some way to a brighter educational future for you. Above all, to God Almighty, for the gift of life,

strength, and wisdom that has enabled me to pursue this important academic milestone. Without His grace, this would not have been possible.

List of Abbreviations

AP: Academic Performance
SSBS: South Sudan Bureau of Standards
MOEST: Ministry of Education, Science and Technology
MSS: Mean standard score
SCT: Social Cognitive Theory
SES: Socio-Economic Status
SMC: School Management Committee
SPSS: Statistical Package for Social Sciences
U.P.E: Universal Primary Education
UN: United Nations
UNESCO: United Nations Educational, scientific, and Cultural organization

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Conflict of interest

The author did not declare any conflict of interest.

Author contributions

Ben Alex Opwonya was the principal investigator. Richard Semanda supervised the research.

Data availability

The data is available upon request.

Informed consent

The respondents who participated in the study consented.

Author Biography

Ben Alex Opwonya holds a master's degree in educational planning and management from Team University. Richard Semanda is a lecturer at Team University. Dr. Salongo Katerega is a lecturer at Team University.

References

1. Adekeye, A. (2022). Teaching social studies in Nigerian colleges. Ue-Ife Press.
2. Ford, D., & Harris, J. (1997). A study of the racial identity and achievement of black males and females. *Roeper Rev.*20,105-110. <https://doi.org/10.1080/02783199709553865>
3. Gratz, J. (2016). The impact of parents' background on their children's Education. New York.
4. Hill, N. et al. (2004). Parents' academic involvement as related to school behavior, achievement, and aspiration: Demographic variations across adolescent child development. *Vol 75 No.5* <https://doi.org/10.1111/j.1467-8624.2004.00753.x>
5. Mudassir, A., & Abubakar, N. (2015). The impact of parents' occupation on Academic

- performance in secondary school students. Multinational Academic Journal of Social Sciences. Vol 3 No.1. <https://doi.org/10.6007/MAJESS/v3-i1/1899>
6. Muhamed, F. & Muhamed, A. (2010). Impact of parental socio-economic status on students' Educational achievements at secondary schools of District Malir, Karachi, Middle-East Journal, Steinberg I, et al. (1992). Ethnic differences in adolescent achievement: An ecological perspective. American psychology. Vol. 47, 723-729. <https://doi.org/10.1037//0003-066X.47.6.723>
7. Kahunzire, P., Akampurira, A., & Tumusiime, J. (2023). Parents' role in pupils' academic performance in Uganda. Uganda Martyrs University Institutional Repository. <https://doi.org/10.24018/ejedu.2023.4.2.533>
8. Misiko, J., Kirwok, P., & Kikechi, D. (2023). Parental educational level and pupils' academic performance in public primary schools in Endebess Sub-County, Kenya. International Journal of Research and Development Organisation.
9. Namukose, G., & Sendagi, R. (2024). Relationship between parents' level of education and pupils' academic performance in primary schools in Palisa District, Uganda. South Journal of Education. <https://doi.org/10.51168/ss2wnw60>
10. Shoaga, A., & Rasheed, I. (2024). Socio-economic variables, parental involvement, and academic performance of pupils. African Journal of Teaching and Learning.

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