

Original Research Article

Teacher Establishment: A Predicament in Academic Achievement in Balambala Sub-County, Kenya

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ABSTRACT

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The drive of the research was to examine the relationship between teacher establishment and student academic performance in Balambala Sub- County in Garissa County, Kenya. The target population was 6 principals and 5 teachers. The study was based on both Hertzberg's expectancy and motivational models. The research employed both quantitative and qualitative approaches that adopt a descriptive research design. Census method was used to sample the population. The study utilized questionnaires to collect data from teachers and interviews from principals. Quantitative data from the questionnaires were analyzed using the spearman correlation test while data from interviews were analyzed verbatim. Research findings showed significant relationship between teacher establishment and student academic performance. Interview responses obtained from the principals and teachers revealed that the main reason for poor academic performance was inadequate teacher recruitment and deployment of TSC teachers coupled with transfers due to insecurity.

Keywords: *Teacher shortage, Board of management, Number of teachers, Student academic performance, Teacher establishment, Teacher shortage.*

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1. INTRODUCTION

In 1990, nations joined the World Declaration on Education for All (EFA) their commitment was made to promote quality of education (Hayes & Bulat 2017). It recognized that enabling universal primary school access will be the first step towards enabling education to thrive. In 2000, the World Education Forum in Senegal adopted a Declaration for Action, which stated that every child is entitled to get a high-quality education. It stated that the significance of quality in education was a key indicator of enrolment (Hayega et al., 2021).

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In Africa, despite inspiring accomplishments, particularly in political and education transformation, numerous gaps and challenges exist. In utmost African states, as denoted by Pitsoe (2013), the occurrence of teacher shortage is related mostly to the HIV/AIDS epidemic, particularly in sub-Saharan states like Nigeria, Kenya, Zambia, and the Central African Republic, and South Africa. Notably, a huge exit of teachers from the occupation is due to the absence of suitable salaries, housing, allowances, and promotion. Additionally, Zimbabwe was conveyed to have lost around two thousand newly-competent high school teachers who might have left for good opportunities in the year 2012 creating low academic achievements among learners.

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Within the context of the Sustainable Development Goal 4, both Education for All and the Dakar

Framework for Action must be accomplished [1]. (Kakupa& Shayo, 2021). SDG 4 urges for authorities to ensure that all girls and boys get a free, equitable and elevated primary and secondary education that translates to relevant and effective learning achievements by 2030. This implies that countries such as Kenya should provide 12 years of free, inclusive, equitable and high-quality primary and secondary education to all citizens. SDG 4 proposes that countries significantly expand the supply of competent teachers by 2030 in order to achieve complete primary and secondary education, and recognizes that teachers are essential to realizing all of the SDG 4 outcome targets. The shortage and unequal distribution of properly trained teachers, especially in disadvantaged areas where Garissa County is not exceptional, it exacerbates the educational equity gap.

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1.1 Statement of the Problem

Teacher establishment and low academic performance have been a problem in secondary schools in Balambala sub-county for the last five years. There has been a debate as to what are the leading factors of students' low academic performance. There is no research in public secondary schools in the Balambala Sub-County on teacher establishment and academic performance of learners. Data from the sub-county Director of Education in Balambala indicate low K.C.S.E performance in the past five years. The K.C.S.E mean scores of secondary schools in the Balambala sub-county are: 2016-(3.32), 2017-(3.457), 2018 – (3.007), and 2019—(3.261), and 2020-(4.166). The average mean grade in the sub-county is D- (minus) which is a great concern to stakeholders.

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Majority of high schools in Garissa County have resorted to the hiring of Board of Management (BOM) teachers. The BOM teachers bring dilemma on teachers' experience and level of preparedness that are considered vital for high students' performance.

A study by Obiri [5](2015), found in the research that working circumstances and workload are among the crucial policies that impact teacher turnover. It is against this background that the current study sought to unearth the association between teacher turnover and student academic achievement in high schools in Balambala Sub-County. The researcher considered associated teacher factors and strategies that the school principals can embrace to minimize cases of low student academic performance in secondary schools in Balambala Sub-County.

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1.2 Purpose of the Study

The present research was investigated the relationship between teacher establishment and student academic performance in secondary schools in Balambala Sub-County.

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1.3 Objective of the Study

The objective of the study was to examine the contribution of teacher establishment to student academic performance in secondary schools within Balambala sub-county.

1.4 Research Hypothesis

What is the contribution of teacher establishment to student academic performance in secondary schools within Balambala sub-county?

2. LITERATURE REVIEW

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This literature review dealt with documented research that scholars have investigated in relation to teacher establishment on students' academic performance. The advantage of education to the state's growth is crucial. This teaching can be informal or formal education. The official education that is the chief emphasis of this research takes residence in the institute. It includes the evolution of information by the educator to the learner(s). In this respect, the correct ratio of the educator to a pupil cannot be overstated. Conferring to the Education policy of Nigeria the educator learner ratio ought to be one educator to forty learners (1:40) in a schoolroom set up (the Federal Republic of Nigeria, 2004). Thus, educator establishment and learner academic presentation repeat on the number of educators in an institute with deference to learners' academic performance.

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One of the reasons for the advanced quantity of pupils in the tutorial is the upsurge in learner registration due to the upsurge in the pupil populace of the civilization. Likewise, the management policy of permitted education for all and the detail that teaching is one of the epoch expansion goals upsurses the populace of learners in institutes without matching upsurge in teaching facilities. By so liability, compression is equestrian on obtainable interplanetary and instructive facilities. In this 21st period, each inhabitant in Nigeria realizes teaching as an instrument for communal welfare. This is as that finished teaching, one might be documented in a civilization, get lucrative occupation and generate prestige together for the receiver of schooling and one's household. Good educator creation and learner academic performance are significant to improve actual class control, assessment of learner with comfort, and qualitative teaching.

It is well-intentioned to remark that teaching is a thoughtful and mindful act and not fair to sedentary down in a schoolroom (Jandrić, et al., 2020). Taking so numerous persons in the tutorial would brand the class overfilled and will be problematic for the educator to badge commands to learners and plaid whether the pupils are succeeding in his/her instruction (Durmuş & Ergen, 2021). On their study upshot on schoolroom organization display those greatest pupils in high school do not need to study except they are carefully observed by the educator (Wang & Louick, 2020). Educator founding has an optimistic influence on learners' academic performance. Well-endowed institutes will have extra amenities to recover the cultural aptitudes of their apprentices.

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3. Research METHODOLOGY

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The research section tackled the study design, area of study, target population, taster size and selection procedures, data gathering tools, data collection procedures, data analysis, and ethical considerations in this study.

3.1 Research Design

This study utilized descriptive survey design paradigms to collect information from the field employing both qualitative and quantitative methods. According to Creswell (2014), mixed method approach focuses on collecting, analyzing and mixing both quantitative and qualitative data in this case a single study. The use of mixed method design was for the purpose of triangulation due to the fact that the

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individual strength of one method offset the other method's weakness.

This study used a descriptive research survey design that employs quantitative and qualitative approaches to data collection within a given time and place (J. I. (Denscombe, 2010)). The design allowed the investigation of the relationship between independent and dependent variables to conclude teacher turnover influences students' academic performance in Balambala sub-County, Garissa County. It was, therefore, necessary to carry out this study to ascertain research objectives.

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3.2 Sample Size of the Research

The table below summarizes the sample size of respondents in the study area.

Table 1. ~~Sample Size for the Study~~

Sample Size for the Study

Category	Population (N)	
	Sample (n)	
Principals	6	6
Teachers	55	55
Total	61	61

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A sample is a sub-group that has been procedurally selected from a population in the study to represent it (J. I. (Oso & Onen, 2011)). The taster size of the research was reached by the use of the census method. The researcher used all the six principals and 55 teachers.

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4. RESULT AND DISCUSSION

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This presents data collected from the field, its findings, and interpretation of the study findings regarding teacher establishment on students' academic performance in public secondary schools in the Balambala sub-county.

The interpretation of the result was based on the study objectives. The tools used to collect data were questionnaires and interviews in the 6 schools. The principals were subjected to interviews, and questionnaires were issued to the 55 teachers. The study results were analyzed using Spearson correlation.

Objective: to examine the relationship between teacher establishment and student academic performance in secondary schools in Balambala Sub-Couty, Garissa County.

Teacher Establishment and Student Academic Performance

The objective of the study sought to examine whether teacher establishment was a contributing factor to student academic performance in secondary schools within Balambala sub-county. Table 2 presents the study findings.

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Table 2.

Teacher establishment

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Statement	Mean	Std. Deviation	N
There are low number of teachers employed by TSC.	3.59	2.812	54
Teacher shortage has caused less effective teaching in school.	3.11	.816	54
There is no problem in teaching by BOM teachers.	3.09	.853	54
Teacher shortage contributes to low academic performance in school.	3.24	.823	54

As shown in table 2 above, most of the teachers agreed with the statement that there are low numbers of teachers employed by TSC (Mean= 3.59, Std Deviation= 2.812). The respondents agreed that teacher shortage has caused less effective teaching in school (Mean= 3.11, Std Deviation= 0.816). There is no problem in teaching by BOM teachers, most respondents agreed with the statement (Mean= 3.09, Std Deviation= 0.853). In relation to the statement that teacher shortage contributes to low academic performance, the study results revealed as follows (mean= 3.24, Std Deviation= 0.823).

The researcher carried out interviews with principals from the 6 schools in regards to the teacher establishment and its effect on student KCSE academic performance. The results indicated that the majority, 5 out of 6 principals said that teacher shortage in Balambala sub county has greatly affected the academic performance in the region, 4 out of 6 principals indicated that TSC has employed low number of teachers in the sub county and those employed do not stay for long before quitting or transferring to other regions. 6 out of 6 principals indicated that they have no problem employing BOM teachers to salvage the issue of teacher shortage in their schools.

The study findings were in agreement with Carolyn, [13] (2006) North Carolina, on their study upshot on schoolroom organization display that greatest pupil in high school do not need to study except they are carefully observed by the educator although there are alterations in gradation of erudition aptitude of every pupil in the schoolroom. Rendering et al [14] (2001) educator founding has an optimistic influence on learners' academic attainment. Well-endowed institutes will have extra amenities to recover the cultural aptitudes of their apprentices

The researcher went further to testsignificant relationship between teacher establishment and student academic performance using spearman correlation.

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Table 3.

Teacher Establishment in Balambala Sub- County in the years 2016 to 2020.

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NO	YEAR	2016		2017		2018		2019		2020	
		CBE	TOD	CBE	TOD	CBE	TOD	CBE	TOD	CBE	TOD
	SCHOOL										

1	X1	19	5	19	7	19	8	19	14	21	9
2	X2	27	13	27	13	27	16	29	21	31	23
3	X3	-	-	9	1	9	2	9	4	9	4
4	X4	-	-	9	1	9	2	9	5	9	3
5	X5	9	5	13	6	18	9	21	12	23	5
6	X6	-	-	-	-	-	-	-	-	-	-
	Total	55	23	77	28	82	37	87	56	93	44

Source: Balambala Secondary schools' principals.

Key words: CBE – Curriculum Based Establishment, TOD – Teachers on Duty.

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From the table, it is evident that between 2016 to 2020 a total of 394TSC teachers were required to effectively deliver the curriculum as CBE demands. However, only 188 teachers were on duty. This demonstrates poor teacher-student ratio for effective learning, hence poor performance.

A spearman's, rho, correlation examined the relationship between teacher establishment and student academic performance.

Table 4.

Correlation between teacher establishment and student academic performance

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Variable		Teacher establishment	Student performance (KCSE mean score)	academic (KCSE mean score)
Teacher establishment	Correlation Coefficient	1	-0.278	
	Sig. 2 tailed		0.04	
Student academic performance (KCSE mean score)	Correlation coefficient	-0.278	1	
	Sig. 2 tailed	0.04		
	N	55	55	

Correlation is significant at 0.05 level (2 tailed).

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Scales scores were computed by adding responses to the 4 items in each scale resulting in a minimum possible 4 and a maximum of 20. The mean for teacher establishment was 3.26 (SD=0.67) and the Mean for academic performance was 3.71 (S.D=0.91). The relationship was negative, weak in strength

and statistically significant ($r(55)=-.278, p=.04$). The null hypothesis was rejected.

The null hypothesis which states that, there is no significant relationship between teacher establishment and student academic performance in secondary schools within Balambala sub-county Kenya' was rejected since $p<0.05$. The study found that a P-Value of 0.04 was less than the chosen alpha level of 0.05 which was used to determine the rejection or acceptance of the null hypothesis in this study, which depicts that there was a significant relationship.

The study findings indicated that the relationship was negative, weak in strength and statistically significant ($r(55)= -.278, p=.04$). The null hypothesis was rejected. These results indicate that there is a significant relationship between teacher establishment and student academic performance (KCSE mean score).

5. CONCLUSION

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Major issues that rose in the course of the study have been discussed. Besides, a summary of the key findings has been given in regard to the study, a conclusion has been drawn from the study findings, and a number of recommendations have been suggested in an attempt to minimize cases of teachers' establishment thus improve the academic performance among students more especially in public secondary schools. Finally, areas for further study have also been identified to fill the knowledge gap that might have been realized by this study.

Furthermore, the question was: What is the relationship between teacher establishment and students' academic attainment in high schools in Balambala Sub-County? The respondents agreed that teacher shortage has caused less effective teaching in school (Mean= 3.11, Std Deviation= 0.816). There is no problem in teaching by BOM teachers, most respondents agreed with the statement (Mean= 3.09, Std Deviation= 0.853). The mean for teacher establishment was 3.26 (SD=0.67) and the Mean for academic performance was 3.71 (SD=0.91). The relationship was negative, weak in strength and statistically significant ($r(53)= -.278, p=.04$). The null hypothesis was rejected.

The hypothesis was rejected meaning there was significant relationship. The facilitating factors need to be minimized in order to attain teacher retention in public secondary schools that will ensure excellence in student academic performance. These study findings concurred with studies by Waititu [11] (2013), Kirochi [11] (2015) and Ruto [17] (2016) who concretized that the rate of teachers' turnover in many private secondary schools is very high, high enough to disrupt instructional cohesion and likely disadvantage students. School environmental factors, job insecurity, poor criteria for both recruiting and promoting teachers as a key issue that need to be improved for student academic performance in secondary schools.

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Teacher shortages and deployment imbalances in the sub-county has been attributed to insecurity in the region, teacher preferences for stations, desire to be with families. Insecurity is a major determinant of teacher attrition due to repeated attacks on non-local teachers by the Somali based armed group,. The departing non-local teachers are later replaced by new and mostly inexperienced non-local teachers, who will within a few years will be replaced by new others, and of course this trend will

affect academic performance of students as it has been/is the case.

6. RECOMMENDATIONS

1. Schools Board of Managements should be mandated to hire and fire TSC teacherstocurb perennial teacher turnover (mass exodus of teachers).
2. Security should be beefed up by both governments to counter militias and religiousextrémists that is a constant threat to our educational institutions.
3. Promotion and recruitment of TSC teachers at the sub-county level should be administered fairly andtransparently.
4. Garissa County government should come up with home grown solutions to theperennial teacher establishment problem and teacher shortages in our primary and secondary school institutions.

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REFERENCES

- Abdi, A. A. (2019). *Problems of Teachers at School Level in Garissa County of North-Eastern Kenya*(Doctoral Thesis). North Eastern Hill University, Shillong.
10. Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th Ed.). Thousand Oaks, CA: Sage Publications, Inc.
8. Durmuş, M. E. & Ergen, Y. (2021). Experience of Primary School Teachers with Inclusion Students in the Context of Teaching Mathematics: A Case Study. *International Journal of Progressive Education*,17(1), 175-195
- Ganster D. C., Rosen C. C. (2013). *work stress and employee health: a multidisciplinary review. Journal of Management. 39 (5): 1085–1122.*
1. Hayes A.M.& Bulat J. (2017). *Disabilities Inclusive Education Systems and Policies Guide for Low- and Middle-Income Countries*. Research Triangle Park (NC): RTI Press.. Retrieved from: <https://www.ncbi.nlm.nih.gov/books/NBK554622/> doi: 10.3768/rtipress.2017.op.0043.1707
2. Inyega, J. O., Arshad-Ayaz, A., Naseem, M. A., Mahaya, E.W. & Elsayed, D. (2021). Post-independence basic education in kenya: an historical analysis of curriculum reforms. *FIRE: Forum for International Research in Education*, 7(1), 1-23.
7. Jandrić, P., Hayes, D., Truelove, I. et al. (2020). Teaching in the Age of Covid-19. *Postdigital Science and Education*, 2, 1069–1230. <https://doi.org/10.1007/s42438-020-00169-6>
4. Kakupa, P. & Shayo, H. (2021). Implementing Sustainable Development Goal on Education (SDG4) amid Donor Fatigue: Challenges for the Global South. *Advances in Social Sciences Research Journal*. 8. 20-28. 10.14738/assrj.811.11132.
16. Kirochi, O.G. (2015). *School based practices influencing teacher turnover in private schools in Embakasi Sub-County, Nairobi County*. Nairobi: University of Nairobi Press.
- Odhiambo, E. O. S., Wasike, S., & Kimokoti, S. N. (2015). Learning institutions 'vulnerability to terrorism. An overview of issue coverage in nowadays' mediaand specialized literature & a case study of Garissa University College, Kenya*Journal of Defense Resources Management (JoDRM)*, 6(2), 21–30.

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Comment [NA16]: This should be checked (in the text).

12. Oso, V., & Onen, D. (2011). Determining Sample Size for Research Activities. *Educational and psychological measurements*, 30, pp 607-610. State: Publisher.

3. Pitsoe, V. J. (2013). *Teacher attrition in south Africa: trends, challenges and prospects*. Journal of social sciences, 36(3): 309-318.

15. Waititu, G.M. (2013). *An analysis of factors influencing turnover of teachers in public high schools in Limuru District, Kenya*. Nairobi: Kenyatta University Press.

9. Wang, M. & Louick, R. (2020). Positioning and Motivation: A Discourse Analysis of Classroom Interactions between Teacher and Students with Disabilities. *Learning Disabilities. A Multidisciplinary Journal*. 25. 10.18666/LDMJ-2020-V25-I2-10310.

5. [Obin \(2015\) ...](#)

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13. [Crosby \(2006\) ...](#)

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14. [Anderina et al \(2011\) ...](#)

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17. [Ruta \(2016\) ...](#)

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