



School External Factors and Teacher Effectiveness in Enhancement of Learners' Academic Achievement of Government Aided Secondary Schools in Lira District, Uganda

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Objective: The objective of this was to establish a relationship between school external factors and teacher effectiveness in promoting learners' academic achievement in government-aided secondary schools in Lira District, Uganda.

Background: Teacher effectiveness centers on the teacher's knowledge of subject matter, expertise and resourcefulness that enhance students' academic performance. Effective teachers are expected to clearly spelling out the learning outcomes to focus learners on the learning goals; make the content as clear as possible and builds on existing knowledge of the learners; engaging

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learners in activities during the teaching and learning process; and display of high level of enthusiasm that reflects professional competence and confidence. The initiatives by the government of Uganda to improve teacher effectiveness seems to be futile in most upcountry Districts, Lira inclusive as Uganda National Examination Board (UNEB) reported poor academic performance of learners in National Examination in most of the Northern Uganda Districts including Lira which is an indicator of teacher ineffectiveness. It is based on this context that this study explored the effects of school external factors on teacher effectiveness in promoting learners' academic achievement in government-aided secondary schools in Lira District, Uganda.

Methodology: The study employed a mixed research approach, using correlational research design. Study participant; head teachers, District Education Officer (DEO) and District Inspector of schools (DIS) were sampled purposively whereas teachers were identified using simple random sampling technique. Data were collected using interviews and questionnaires. Pearson's product-moment correlation coefficient (r) was used to determine the association between the study variables whereas multiple linear regression analysis was used to determine the degree of predictability between the study variables. The researcher used thematic analysis to analyze qualitative data.

Results: The study revealed a strong positive association between school external factors and teacher effectiveness in the promoting learners' academic achievement in government-aided secondary schools in Lira District ($r=0.756, P<0.05$). The study further revealed that school external factors significantly account for the teacher effectiveness in the promotion of learners' academic achievement in government-aided secondary schools in Lira District, although it accounts for only 55.6% ($R^2 = 0.572, p<0.05$). The qualitative interviews held with the head teachers, District Education Officer, and District Inspector of schools also showed that school external factors influenced the teachers' effectiveness in promoting learners' academic achievement in government-aided secondary schools in Lira District.

Conclusion: The study revealed a strong positive significant correlation between school external factors and teacher effectiveness in the promoting learners' academic achievement in government-aided secondary schools in Lira District. This implies that any change on the school external factors causes a positive or negative shift on teacher effectiveness in the promoting learners' academic achievement. Therefore, we recommend the government and policy makers and external supervisors should strike a balance between school external factors and teacher effectiveness in order to improve learners' academic achievement. There is also need to replicate this study in tertiary institutions of learning.

Keywords: School external factor; teacher effectiveness; academic achievement government aided secondary schools.

1. INTRODUCTION

It is impossible to overstate the importance of teachers in students' education and academic success [1]. Teacher effectiveness has been regarded as crucial to student achievement and attainment of the 21st century competencies [2]. Effective teaching, adequate subject-matter knowledge, student evaluation, identification of the students' needs and requirements for optimal learning, and the ability to use questions to engage and challenge the students are the foundations of a teacher effectiveness [3]. Therefore, the quality of teachers' job performance is a major component of effective teaching in schools at all levels and instructors are required to become effective with high job performance in order to accomplish the role and contribution indicated [4]. In order to raise the

standard of instruction and learning in all secondary schools throughout Uganda, the government of Uganda has over the years launched a number of projects through the Ministry of Education and Sports in collaboration with other development partners like the World Bank [5]. However, a number of findings about the declining quality of education in various regions of Uganda in general and Lira in particular suggest that some of these measures may be fruitless [6]. Due to this, the majority of parties involved in the Lira district are criticizing teachers for failing to fulfill their obligations as outlined in the teachers' "code of conduct," but they are doing so without taking into account all of the elements that affect teachers' efficacy in the teaching-learning process [7]. Research on internal school issues showed that they have a big impact on how successful teachers are.

Therefore, the purpose of this study was to establish a relationship between school external factors and teacher effectiveness in promoting teacher effectiveness in government-sponsored secondary schools in the Lira District, Uganda.

2. METHODOLOGY

2.1 Study Design

To comprehend the subject under examination, a mixed-method research technique rooted in pragmatism was adopted [8]. To gauge the relationships between the investigated variables, a correlational research design was adopted [9]. The study focused on all secondary schools in Lira District, all instructors in government-aided secondary schools in Lira District, all head teachers in secondary schools in Lira District, District inspectors of schools (DIS), and District Education Officer (DEO).

2.2 Sampling and Participant Selection

Simple random selection method was used to choose the teachers, giving each teacher an equal chance of being chosen [10]. The lottery method was used to pick each person on an individual basis [11]. Each member of the population in this method was given a number, and the researcher chose the number that best represented each person as they were being selected. [12]. This method minimizes biases in data gathering and is the simplest way to obtain a representative sample from the target population [12]. Purposive sampling was taken in choosing the DEO, DIS, and Head Teachers. Purposive sampling is a non-probability sampling technique where study participants are specifically chosen based on their capacity to provide light on a given theme, concept, or phenomenon [13]. This group was purposefully chosen as it is thought that they are the guardians of data on the study variables [14].

2.3 Sample Size Determination

The sampling frame provided in Table 1 illustrates how the sample size was selected using Morgan and Krejcie's (1970) table of sample size selection.

2.4 Data Collection Tools

Two techniques of data collection, a questionnaire survey and an in-depth interview schedule, were employed to compile pertinent information on the study variables. The researchers distributed open-ended and closed-ended questionnaires to 97 teachers from 4 government-aided secondary schools in the Lira District to get their thoughts on how school external factors affect teacher effectiveness. The closed-ended surveys were graded using a five-point Likert scale, with the options being strongly disagree (SD), disagree (D), not sure (ND), agree (A), and strongly agree (SA); the scores were SD (1), D (2), ND (3), agree (A) (4), and SA (5). Four head teachers from the four government-aided secondary schools, plus the Lira District Education Officer (DEO) and Lira District Inspector of Schools (DIS), were the subjects of key informant interviews. In this instance, a list of questions intended to be asked during the interview served as the interviewer's guide [15].

2.5 Quality Control of the Study Tools

Before the study began, the interviewers received training on how to get informed consent, conduct the interview, and give the questionnaires. Additionally, practice interview sessions and a presentation of the study project's overview were part of the training. Before the study began, the research questionnaire was pretested among the study population to make sure the questions were pertinent and understandable.

Table 1. The sampling frame

Category	Number(N)	Sample(S)	Sampling technique
Schools	04	04	Purposive sampling
Head teachers	04	04	Purposive sampling
Teachers	130	97	Simple random
DEO	01	01	Purposive sampling
DIS	01	01	Purposive sampling
Total		107	

2.6 Data Analysis

In order to assess the association between school external factors and teacher effectiveness in government-aided secondary schools in Lira District, quantitative data were employed, and Pearson's product-moment correlation coefficient (r) was calculated.

To ascertain the level of predictability between school external factors and teacher effectiveness, multiple linear regression analysis was used.

To ascertain the type of the link, correlation analysis (r^2) was carried out. Thematic analysis was used to study qualitative data, recognizing themes as they emerged [16].

3. RESULTS

3.1 Correlation between School External Factors and Teacher Effectiveness

As can be seen in Fig. 1 and Table 2, the study found a significant positive association between school external factors and teacher effectiveness in government-aided secondary schools in the Lira district ($r = 0.756$, $P=0.05$). The implication of this is that any improvement in school external factors results into a similar improvement in teacher effectiveness and vice versa.

3.2 Proportion of Teacher Effectiveness Accounted for by the Schools' External Factors

According to regression analysis, external factors at the school can explain roughly 57% of the variance in teacher effectiveness, with an R^2 value of 0.572.

This suggests that, despite only accounting for 57% as shown in Tables 3 and 4, the school external factors as predictor variables significantly account for teacher effectiveness in government-aided secondary schools in the Lira District ($r= 0.756$, $p <0.05$).

3.3 Impact of School External Factors on Teacher Effectiveness

Qualitative interviews with the head teachers, the district education officer, and the district inspector of schools to get their opinions on how school external factors affect teacher effectiveness in government-aided secondary schools in Lira District, have shown that these factors have both positive and negative effects. A case in point; one head teacher said that low and discriminatory salary payment of Arts teachers in government-aided secondary schools by the government compared to the Science teachers has highly demotivated some Arts teachers, making them ineffective in guiding the learners.

Another head teacher expressed a similar concern:

"Poor government policy of paying the science teachers better than their supervisors and their counterparts of Arts and Humanities is quite demotivating and may lower the effectiveness of some teachers in terms of performing their duties as required".

The District Education Officer (DEO) noted that a teacher's domestic relationship with his/her family may influence teacher effectiveness. The DEO asserted:

"Teachers with unstable family relationships are associated with domestic violence which distorts the teachers' time for lesson planning and sometimes time for arriving at school, making the teacher ineffective in performing his/her school duties and responsibilities".

The District Inspector of Schools (DIS) noted that the security of the school environment is a very important school external factor that may influence teacher effectiveness. The DIS had this to say:

"If there is bad security in the school community, teachers always feel insecure and report late to school for work and leave school earlier for their safety hence making the teacher ineffective in completing the syllabi and performing other duties assigned".

Table 2. Pearson correlation for school external factors and teacher Effectiveness

		School External Factors	Teacher Effectiveness
School External Factors	Pearson Correlation	1	.756**
	Sig. (2-tailed)		.000
	N	100	100
Teacher Effectiveness	Pearson Correlation	.756**	1
	Sig. (2-tailed)	.000	
	N	100	100

** Correlation is significant at the 0.01 level (2-tailed)

Table 3. Model Summary for School external factors and teacher effectiveness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.756 ^a	.572	.567	.44956

a. Predictors: (Constant), SEF

Table 4. ANOVA for School external factors and teacher effectiveness

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.438	1	26.438	130.816	.000 ^b
	Residual	19.806	98	.202		
	Total	46.244	99			

a. Dependent Variable: TE

b. Predictors: (Constant), SEF

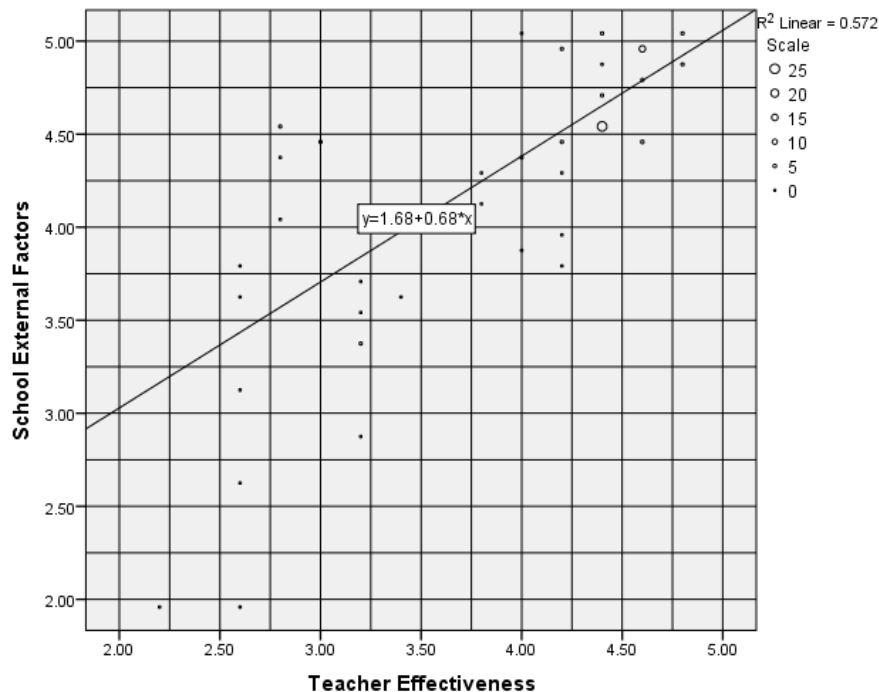


Fig. 1. The Scattered Plot for School External Factors and Teacher Effectiveness

4. DISCUSSION

Results showed that in government-aided secondary schools in Lira district, there is a substantial significant positive relationship

between school external factors and teacher effectiveness. This suggests that enhancing school external factors (Salary, external support supervision, school inspection, Security and supportive government policies) leads to

improvement in teacher effectiveness in the promoting learners' academic achievement in government-aided secondary schools in Lira District. This finding is coherent with the study findings by Munnawar and Awan (2017) who opined that the factors affecting the effectiveness of female teachers in urban and rural areas of Bahawalpur in Pakistan included among others; political instability and undue political interference [17]. The coefficient of determination (r^2) 0.572, signifies that 57% of the variation in teacher effectiveness in government-aided secondary schools in Lira district schools is accounted for by variation in the school external factors. There is a need for the District Education Officer and District Inspector to strengthen school inspection and external support supervision, followed by giving immediate feedback to teachers to improve on their practices. This is in conformity with MacBeath and Martimore (2001) and Wilcox (2005) who asserts that teachers will be able to respond to the findings and track the strategies for change and improvement when their problems are clearly pinpointed and supported [18]. As noted by Salomon, [19] "the prevailing peace or conflict within communities around the schools often has ripple effects on the teaching and learning activities of such schools" (Salomon, 2011). The Government therefore should ensure peace and good security within the school to allow teachers to perform their duties effectively. Bhambra [20] contends that "salary is the most common form of monetary reward which determines employee performance" [20]. This implies that government should develop a policy that ensures uniform increment in salary for all teachers with the same academic qualification, regardless of whether one teaches Arts or Science Stride et al. (2008) contend that when employees notice that there is a limited relationship between rewards and performance, they can set minimum goals just to retain jobs although may not see the reason for excelling [21].

5. CONCLUSION

The study revealed that school external factors affect teacher effectiveness in the promoting learners' academic achievement in government-aided secondary schools in Lira District. This suggests that in order to enhance teacher effectiveness, school external factors should be favorably addressed. Therefore, in-depth research is required on other players besides school external elements that may affect teachers' effectiveness in schools, and

comparable research should be carried out in Uganda's higher educational institutions.

CONSENT

In order to ensure research ethics, the consent of all participants was sought before they participate in this study. A consent form stating the aims of the study and the proposed use of the information collected was presented and explained to the respondents before the interviews. The identity of the participant was kept hidden to ensure confidentiality.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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