

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

ABSTRACT

Background: Teacher effectiveness is referred to as a teacher's ability to produce higher-than-expected gains in students' standardized test scores. Teachers are expected to become effective and display high job performance in terms of learners' academic achievement and growth. The quality of Education and learners' academic achievement in Lira district remains low which is an indicator of teacher ineffectiveness. It is upon this background that this study aimed to explore the effects of school external factors on teacher effectiveness in promotion of learners' academic achievement of government aided secondary schools in Lira District, Uganda.

Methodology: A mixed research method with a was used in which 107 populations were sampled using correlational research design was used. Purposive sampling technique was used to identify 4 head teachers, District Education Officer (DEO) and District Inspector of schools (DIS) while simple random sampling was used to select identify teachers from a total population of 130 teachers. Both interviews and questionnaire questioners were used for data collection. The relationship between the variables was determined using Pearson's product-moment correlation coefficient (r) while multiple linear regression-----. The and qualitative data were analyzed using thematic analysis by identifying the themes as they appear.

Results: The result showed a positively strong significance relationspendence between school external factors and teacher effectiveness in secondary schools in Lira district ($r = 0.745$, $P < 0.05$), implying that the school external factors which are the predictor variables significantly account for the teacher effectiveness although they account for only 55.6% ($R^2 = 0.556$, $p < 0.05$). The qualitative interviews held with the head teachers, DEO, and DIS also revealed that school external factors influence dthe teachers' effectiveness.

Conclusion: The study revealed that there is a significant strong positive association between school external factors and teacher effectiveness in government aided secondary schools in Lira district. This implies that increasing or decreasing school external factors results in a considerable increase or decrease in teacher effectiveness. Therefore, it is recommended that further studies should be done on other factors that might influence teacher

effectiveness other than school external factors alone and similar studies should be replicated and conducted in primary (elementary) schools and higher institutions of learning.

Keywords: school External factor, Teacher effectiveness, District Education Officer, District inspectors of schools.

1. INTRODUCTION

The role and contribution of teachers in students' education and academic achievement cannot be undermined[1]. For teachers to actualize the role and contribution mentioned, they are expected to become effective teachers who display high job performance as the quality of teachers' job performance is a primary factor for effective teaching in schools at all levels[2]. The Government of Uganda has over the years put forward several initiatives through the Ministry of Education and Sports together with other development partners such as the World Bank to improve the quality of teaching and learning in all secondary schools in Uganda[3]. Some of these initiatives however, seems to be futile as there are series of observations about the falling standard of education in some Districts of Uganda in general and including Lira in particular[4]. As a result, most stakeholders in Lira district are blaming teachers of not performing their duties as required by the teachers 'code of conduct' though without considering all factors that influence teacher effectiveness in teaching-learning process. A study on school internal factors showed that school internal factors have significance influence on teacher effectiveness[5]. This study therefore, sought to investigate the influence of school external factors on teacher effectiveness in government aided secondary schools in Lira district.

2. METHODOLOGY

2.1 Study Design and Setting

The study used a mixed-method approach rooted in pragmatism which involves using both qualitative and quantitative research methods to best understand the problem under investigation[6]. A correlational research design was used to measure the associations between the study variables[7]. The study focused on all secondary schools in Lira District, all teachers 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

The teachers were selected using a simple random sampling technique in which every person in the target population was given an equal chance of being selected [8]. The selection of each individual was done independently using the lottery method [9]. In this method, each person in the population was assigned a number and during the selection, the researcher picked the number that represented different persons[10]. This technique is the easiest way of getting

are representative sample from the target population and it reduces biases in data sampling is a collection [10]. The schools, DEO, DIS, and Head Teachers, were purposively selected. Purposive sampling is a non-probability sampling technique that which involves the intentional selection of study informants based on their ability to illuminate a specific theme, concept, or phenomenon [11]. This category was selected using purposively because they are believed to be the custodians of information about the study variables [12].

2.3 Sample Size Determination

The sample size was determined using Morgan and Krejcie's (1970) table of sample size selection as shown in the sampling frame indicated in (Table 1 that follows).

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	Simplerandom
DEO	01	01	Purposive sampling
DIS 01 01 Purposive sampling			
Total		107	

Formatted: Indent: First line: 6 ch

2.4 Data Collection Tools

Together relevant information about the study variables, two methods of data collection were used namely; a questionnaire survey and an in-depth interview schedule.

A total of 97 teachers from 4 government-aided secondary schools in Lira District were served with open and closed-ended questionnaires to seek their opinion on how school external factors influence teacher effectiveness. The closed-ended questionnaires were scored on a five-point Likert scale ranging from strongly disagree (SD), Disagree (D), Not decided (ND), Agree (A) and Strongly agree (SA); that is SD(1), D(2) ND(3) A (4) and SA (5). Key informant interviews were conducted with 4 headteachers from the 4 government-aided secondary schools, including Lira District Education Officer (DEO) and Lira District inspector of schools (DIS). In this case, the interviewer was guided by a list of questions to be covered during an interview [13].

Formatted: Font: Bold

Formatted: Font: Bold

Formatted: Font: Bold

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	Simplerandom
DEO	01	01	Purposive sampling
DIS 01 01 Purposive sampling			
Total		107	

2.5 Quality Control of the Study Tools

The interviewees were retrained before the start of the study on the procedures of obtaining informed consent and administering the interview and the questionnaires. The training also included practice interview sessions and sharing an overview of the research project. The research questionnaire was pretested before the start of the study within the study population to ensure that the questions were relevant and comprehensible.

2.6 Data analysis

For quantitative data, Pearson's product-moment correlation coefficient (r) was used to determine the relationship between school external factors and teacher effectiveness in government aided secondary schools in Lira District. The multiple linear regression analysis was done to determine the degree of predictability between school external factors and teacher effectiveness.

Correlation analysis (r^2) was conducted to determine the nature of the association. Qualitative data were analyzed using thematic analysis by identifying themes as they appear [14].

3. RESULTS

3.1 Relationship between School External Factors and Teacher Effectiveness

A strong positive significant correlation exists between school external factors and teacher effectiveness in government aided secondary schools in Lira district ($r = 0.745, P = 0.05$) as shown in (the Fig. 1 and Table 2). This implies that as school external factors increase, teacher effectiveness also increases similarly.

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

The $R^2 = 0.556$ obtained from regression analysis indicated that about 55.6% of the variance in teacher effectiveness can be explained by school external factors. This implies that the school external factors as predictor variables significantly account for teacher effectiveness in government aided secondary schools in Lira district ($r = 0.745, p < 0.05$), although it accounts for only 55.6% ($p < 0.05$, as depicted in Tables 3 and 4, Fig. 1).

3.3 Impact of School External Factors on Teacher Effectiveness

Qualitative interviews administered to the head teachers, District Education Officer, and District Inspector of Schools to seek their views on how school external factors influence teacher effectiveness in government aided secondary schools in Lira District revealed that the school internal factors influence teacher effectiveness both positively and negatively. For instance; 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 quit demotivating and may lower the effectiveness of some teachers in terms of performing their duties as required".

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

"Teachers with unstable family relationship 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".

Formatted: Indent: First line: 0", Left 6.5 ch, Right 5.5 ch, Line spacing: single

Formatted: Indent: First line: 0", Left 5 ch, Right 3 ch, Line spacing: single

The District Inspector of Schools (DEO) noted that security of the school environment is a very important school external factor that may influence teacher effectiveness. [TheDIS 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	.745**
	Sig. (2-tailed)		.000
	N	103	103
Teacher Effectiveness	Pearson Correlation	.745**	1
	Sig. (2-tailed)	.000	
	N	103	103

** . 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	.745 ^a	.556	.551	.45796

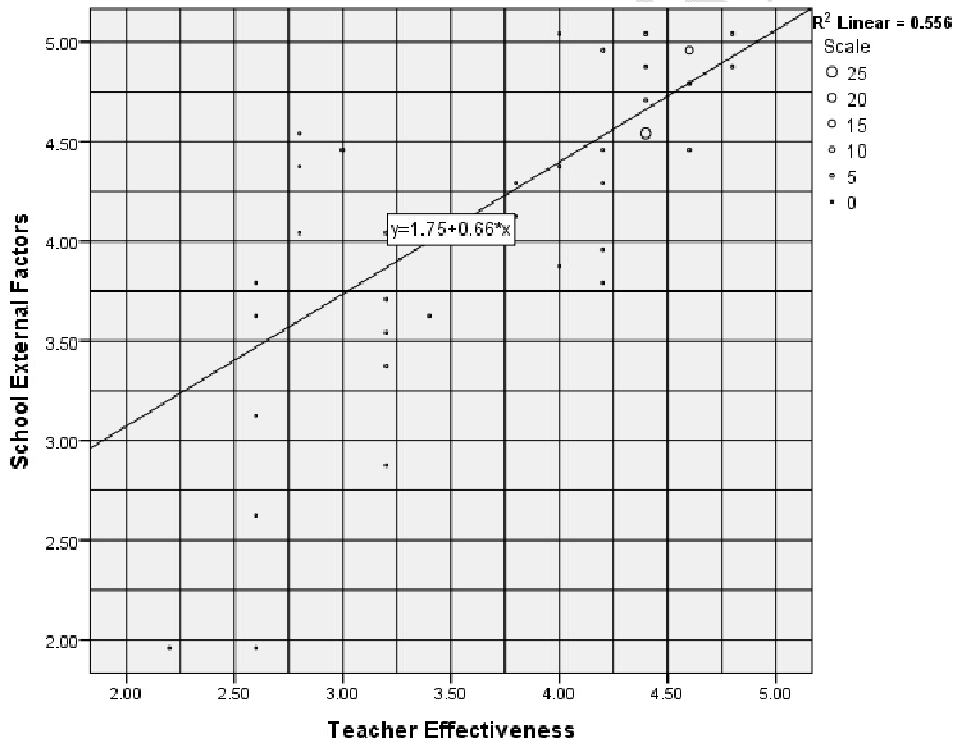
a. Predictors: (Constant), SEF

Table 4 ANOVA for School external factors and teacher effectiveness

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.500	1	26.500	126.355	.000 ^b
	Residual	21.182	101	.210		
	Total	47.682	102			

a. Dependent Variable: TE
b. Predictors: (Constant), SEF

Fig.1. The Scattered Plot for School Internal Factors and Teachers' Effectiveness



4. DISCUSSION

Findings revealed that there is a strong significant positive correlation between school external factors and teacher effectiveness in government aided secondary schools in Lira district. This means that improving school external factors (Salary, external support supervision, school inspection, Security and supportive government policies) leads to improvement in teacher effectiveness in schools. 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[15]. The study findings also revealed that the coefficient of determination, (r^2) is 0.556, signifying that about 55.6% 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 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[16]. As noted by Salomon, (2011) that prevailing peace or conflict within communities around the schools often has ripple effects on the teaching and learning activities of such schools[17]. The Government therefore, should ensure peace and good security within the school to allow teachers perform their duties effectively. Bhambra (2008) contends that salary is the most common form of monetary reward which determines employee performance[18]. 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 limited relationship between rewards and performance, they can set minimum goals so as to retain jobs although may not see the reason for excelling[19].

Formatted: Superscript

5. CONCLUSION

The study showed that school external factors affect teacher effectiveness in government aided secondary schools in Lira District. This indicates that schools' external factors should be addressed positively to improve teacher effectiveness. Hence, there is a need for extensive studies on other actors other than school external factors that may influence teacher effectiveness in schools and similar studies should be conducted in higher institutions of learning in Uganda.

ETHICAL CONSIDERATION

In order to ensure research ethics, the consent of all participants were sought before they participated 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.

REFERENCES REORGANIZE THIS LIST ALPHABETICALLY BASED ON THE FIRST SIRNAME(S) OF THE AUTHORS

1. McLean, L. and C.M. Connor, *Depressive symptoms in third-grade teachers: Relations to classroom quality and student achievement*. Child development, 2015. **86**(3): p. 945-954.
2. Stronge, J.H., *Qualities of effective teachers*. 2018: Ascd.
3. Fraser, A. and M. Lockheed, *5 Uganda Case Study*. The Role of Intergovernmental Fiscal Transfers in Improving Education Outcomes, 2021: p. 85.
4. AMANDU, D.I., M.B. Kaguhangire, and E. Mwesigye, *Factors Affecting Academic Performance of Students in Uganda Certificate of Education (UCE) Under Universal Secondary Education (USE) Schools in Uganda: A case of Koboko District*. 2016, Uganda Management Institute.
5. Odit, E., et al., *School Internal Factors and Teacher Effectiveness in Secondary Schools in Lira District, Uganda*. Asian Journal of Education and Social Studies, 2023. **40**(1): p. 44-51.
6. Ramlo, S., *Mixed method lessons learned from 80 years of Q methodology*. Journal of Mixed Methods Research, 2016. **10**(1): p. 28-45.
7. Bloomfield, J. and M.J. Fisher, *Quantitative research design*. Journal of the Australasian Rehabilitation Nurses Association, 2019. **22**(2): p. 27-30.
8. Taherdoost, H., *Sampling methods in research methodology; how to choose a sampling technique for research*. How to choose a sampling technique for research (April 10, 2016), 2016.
9. Avin, S., *Mavericks and lotteries*. Studies in History and Philosophy of Science Part A, 2019. **76**: p. 13-23.
10. Deghani, M., et al., *The benchmark lottery*. arXiv preprint arXiv:2107.07002, 2021.
11. Emmel, N., *Sampling and choosing cases in qualitative research: A realist approach*. 2013: Sage.
12. Snedecor, G.W., *Design of sampling experiments in the social sciences*. Journal of Farm Economics, 1939. **21**(4): p. 846-855.
13. Griffee, D.T., *Research Tips: Interview Data Collection*. Journal of Developmental Education, 2005. **28**(3): p. 36-37.
14. Kiger, M.E. and L. Varpio, *Thematic analysis of qualitative data: AMEE Guide No. 131*. Medical teacher, 2020. **42**(8): p. 846-854.
15. Ab Rahman, S.R., et al., *SOCIAL MEDIA INFLUENCES ON THE ISIS MOVEMENT AMONG POTA DETAINEES IN MALAYSIA*. QALAM International Journal of Islamic and Humanities Research, 2022. **2**(3): p. 1-8.
16. Ranson, S., et al., *Does governance matter for school improvement? School effectiveness and school improvement*, 2005. **16**(3): p. 305-325.
17. Salomon, G., *Four major challenges facing peace education in regions of intractable conflict*. Peace and conflict, 2011. **17**(1): p. 46-59.
18. Bhabra, G.K., *Book Review: Alan Sica and Stephen Turner (eds) The Disobedient Generation: Social Theorists in the Sixties Chicago, IL: Chicago University Press, 2005, £ 15.50 pbk (ISBN: 0 226 75625 4), xiv+ 368 pp*. Sociology, 2008. **42**(4): p. 784-786.
19. Birdi, K., et al., *The impact of human resource and operational management practices on company productivity: A longitudinal study*. Personnel psychology, 2008. **61**(3): p. 467-501.