



School Internal Factors and Teacher Effectiveness in 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

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 internal factors on teacher effectiveness in secondary schools in Lira District, Uganda.

Methodology: A mixed research method was used in which 263 individuals were sampled using a correlational research design. A purposive sampling technique was used to identify head teachers, District Education Officer (DEO) and District Inspector of schools (DIS) while simple random sampling was used to identify teachers, members of the school Board of Governors (BOG) and Parent Teachers' Associations (PTA). Both interviews and questionnaires were used for data

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collection. The relationship between the variables was determined using Pearson's product-moment correlation coefficient (r) and qualitative data were analyzed using thematic analysis by identifying themes as they appear.

Results: The result showed a strong positive correlation between school internal factors and teacher effectiveness in secondary schools in Lira district ($r= 0.751$, $P<0.05$), implying that the school internal factors which are the predictor variables significantly account for the teacher effectiveness although they account for only 56% ($R^2 = 0.564$, $p<0.05$). The qualitative interviews held with the head teachers, DEO, DIS and focused group discussions held with BOG and PTA also revealed that school internal factors influence teacher effectiveness.

Conclusion: The study revealed that there is a significant strong positive relationship between school internal factors and teacher effectiveness in secondary schools in Lira district. This implies that increasing or decreasing school internal factors in secondary schools results in a considerable increase or decrease in teacher effectiveness. Further studies should be done on other factors that might influence teacher effectiveness other than school internal factors alone and similar studies should be conducted in primary (elementary) schools and higher institutions of learning.

Keywords: School internal factor; teacher effectiveness; secondary schools.

1. INTRODUCTION

International research-based evidence has indicated the role and contribution of teachers in students' education and academic achievement [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]. Teacher effectiveness refers to the teacher's knowledge of the subject matter, expertise and resourcefulness that enhance students' academic performance [3]. Teacher effectiveness centers on good teaching, possessing appropriate and sufficient knowledge of the subject matter, evaluating the students, identifying their appropriate learning needs and requirements, and possessing skills regarding the usage of questions to engage and challenge the students [4].

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 [5]. Some of these initiatives include the introduction of the Basic Requirement and Minimum Standards (BRMS) by the Directorate of Education Standards (DES) for all teachers with the aim of helping education professionals improve their experiences and become effective in teaching [6]. However, these initiatives seem to be futile as there are a series of observations about the falling standard of education in some Districts of Uganda including Lira District [7].

As a result, most education stakeholders in Lira district are blaming teachers for not performing their duties as required by the Uganda teachers 'code of conduct. It is based on this background that this study aimed at determining the schools' internal factors and how it affects teacher effectiveness since the external efforts by the government and other development partners to improve teaching and learning seem to be yielding less interns of learners' academic growth. School internal factors in this study refer to factors within the school thought to influence teachers' performance and learners 'academic achievement. The schools' internal factors focused on in this study includes the teacher's support supervision, presence of teaching and learning materials, school culture, teacher's ability, teacher's motivation, and mentoring.

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 [8]. A correlational research design was used to measure the associations between the study variables [9]. The study focused on all secondary schools in Lira District, all teachers in secondary schools in Lira District, all head teachers in secondary schools in Lira District, all Board of Governors (BOG) in secondary schools in Lira District all Parent Teacher Association (PTA), as well as District inspectors of schools (DIS) and District Education Officer (DEO).

2.2 Sampling and Participant Selection

The teachers, Board of Governors (BOG) and parent teachers association (PTA) were selected using a simple random sampling technique in which every person in the target population was given an equal chance of being selected [10]. The selection of each individual was done independently using the lottery method [11]. In this method, each person in the population was assigned a number and during the selection, the researcher picked the number that represent different persons [12]. This technique is the easiest way of getting a representative sample from the target population and it reduces biases in data collection [13]. The schools, DEO, DIS, and Head Teachers, were purposively selected. Purposive sampling is a non-probability sampling which involves the intentional selection of informants based on their ability to elucidate a specific theme, concept, or phenomenon [14]. This category was selected using purposive sampling because they are believed to be the custodians of information about the study variables [15].

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 (Table 1).

2.4 Data Collection Tools

To gather relevant information about the study variables, three methods of data collection were used namely; a questionnaire survey, an in-depth interview and a focused group discussion.

A total of 103 teachers from 4 government-aided secondary schools and 4 private-aided secondary schools were served with open and closed-ended questionnaires to seek their opinions on how school internal factors affect 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). Focused group discussions were used to collect data from the Board of Governors (BOG) and Parent Teachers Association (PTA). It involved asking guiding questions to a group of PTA and BOG members to seek their opinion on the relationship between school internal factors and teacher effectiveness. This method was used to collect data from BOG and PTA because these groups are homogeneous and share the same characteristics. Key informant interviews were conducted with 8 head teachers from the 8 secondary schools, including Lira District Education Officer (DEO) and Lira District inspector of schools (DIS). In this case, the interviewer guided a list of questions to be covered during an interview [16] and these were administered to head teachers, District Education Officer (DEO) and District inspectors of schools (DIS).

2.5 Quality Control of the Study Tools

The interviewers were trained before the start of the study on the procedures of obtaining informed consent and administering the interview questionnaire. 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.

The content of the qualitative data from in-depth interviews and focused group discussions (FGDs) was explored on the same day as the interviews. Furthermore, the analysis of qualitative interview data was done following the approaches suggested by Krefting to ensure the credibility, applicability, dependability, and confirmability of the data [17].

Table 1. The sampling frame

Category	Number(N)	Sample(S)	Sampling technique
Schools	08	08	Purposive sampling
Headteachers	08	08	Purposive sampling
Teachers	140	103	Simple random
BOG	95	76	Simple random
PTA	80	66	Simple random
DEO	01	01	Purposive sampling
DIS	01	01	Purposive sampling
Total		263	

2.6 Data Analysis

For quantitative data, Pearson's product-moment correlation coefficient (r) was used to determine the relationship between school internal factors and teacher effectiveness in secondary schools in Lira District. Regression analysis was done to determine the degree of predictability between school internal 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 [18].

3. RESULTS

3.1 Relationship between School Internal Factors and Teacher Effectiveness

A strong positive correlation exists between school internal factors and teacher effectiveness in secondary schools in Lira district ($r = 0.751$, $P=0.05$) (Fig. 1, Table 2). This implies as school internal factors increase, teacher effectiveness also increases.

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

The $R^2 = 0.564$ obtained from regression analysis indicated that about 56% of the variance in teacher effectiveness can be explained by school internal factors. This implies that the schools' internal factors as predictor variables significantly account for teacher effectiveness although they account for only 56% ($p < 0.05$, Tables 3 and 4, Fig. 1).

3.3 Influence of School Internal Factors on Teacher Effectiveness

Qualitative interviews administered to the head teachers, District Education Officer, and District Inspector of Schools and focused group discussions held with BOG and PTA to seek their perceptions on how school internal factors influence teacher effectiveness revealed that school internal factors influence teacher effectiveness both positively and negatively.

For instance, it was reported by one of the head teachers that “the presence of school internal factors such as support supervision, motivation and mentoring of teachers helps to improve teacher effectiveness”.

A case in point, one of the head teachers reported that “my teachers have become fairly effective because we make teaching and learning materials available in schools and also carryout support supervision in order to help them improve”.

Another Head teacher reported that “few of our teachers have become effective in teaching, classroom management, time management and record-keeping due to some factors that we make available within the school such as motivation in terms of allowances, support supervision, mentoring and guidance and counselling”.

From the PTA and BOG focused group discussion held, it emerged that the good incentives and accommodation given to teachers in schools makes teacher like their job and tend to become effective in teaching. The DEO argued that the leadership style used by the school administrators is key to improving teacher effectiveness. It was noted by DIS that mentoring is essential in guiding teachers to improve their effectiveness.

4. DISCUSSION

The findings reveal that a strong significant positive relationship exists between school internal factors and teacher effectiveness in secondary schools in Lira District. This implies that any improvement in school internal factors, that is (the presence of teaching and learning materials, teachers' motivation, teachers mentoring, and teachers' support supervision may lead to a great improvement in teacher effectiveness. This is in agreement with Ramli et al., (2018) that internal school factors can influence the operations of the school both positively and negatively [19]. There need for school administrators to improve school internal factors in order to make teachers effective. This supports the findings by Mupa & Chinooneka (2015) that the availability of learning materials and equipment at school is an internal factor that improves teacher effectiveness [20]. We also found out that at least 56% of teacher effectiveness in secondary schools in Lira District is a result of variation in school internal factors. This maintains that school internal factors have a significant positive influence on teacher effectiveness, hence keen attention needs to be paid towards the school internal factors to boost the education quality in Lira District.

Table 2. Pearson correlation for school internal factors and teacher effectiveness

		School internal factor	Teacher effectiveness
School internal factor	Pearson Correlation	1	.751**
	Sig. (2-tailed)		.000
	N	103	103
Teacher effectiveness	Pearson Correlation	.751**	1
	Sig. (2-tailed)	.000	
	N	103	103

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

Table 3. Model summary for school internal factors and teacher effectiveness

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.751 ^a	.564	.560	.45378

a. Predictors: (Constant), School internal factors

Table 4. ANOVA for school internal factors and teacher effectiveness

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	26.885	1	26.885	130.560	.000 ^b
	Residual	20.798	101	.206		
	Total	47.682	102			

a. Dependent Variable: Teacher effectiveness

b. Predictors: (Constant), School internal factors

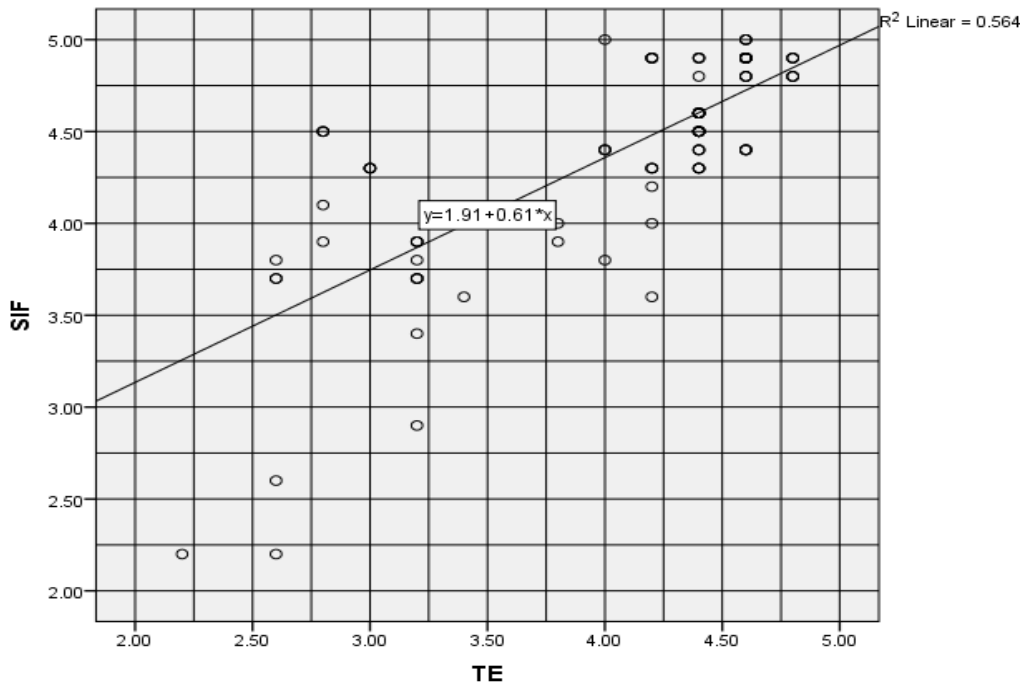


Fig. 1. Scattered plot for school internal factors and teacher effectiveness

Key: TE = Teacher Effectiveness and SIF = School Internal Factors

The Ugandan government through the Ministry of Education and Sports undertook a much-awaited education reform by replacing the old subject-based curriculum with a new thematic or competence-based curriculum for primary/

elementary schools and lower secondary schools or O'Level in the year 2020 [21,22]. These curriculums were implemented at primary and lower secondary schools in the years 2007 and 2020 respectively. The thematic curriculum is

believed that it will improve education quality in Uganda, more specifically by increasing the achievement levels of students in literacy, numeracy and life skills [22]. However, the commitment of the government to availing the teaching and learning materials has been very poor and this is an internal school factor that can greatly affect the teacher effectively [22].

Recently, there has been secondary school teachers' payment disparity effected in the year 2021 where the science teachers' salaries were increased by approximately 400% (science degree and diploma holders earning gross monthly salaries of ~\$1,097.60 and ~\$823.2 respectively) unlike their art teachers counterparts who did not receive salary increment (art degree and diploma holders earning gross monthly salaries of ~\$246.96 and ~\$192.08 respectively) even though they also requested the government for pay increase [23,24]. This could be a great demotivational factor for art teachers that might affect their performance in arts education in the near future [24,25]. The government through the public service should exercise equity in the payment of teachers nationwide and the payment should at least be fair enough for the teachers to meet the current economic challenges in the country. This might greatly motivate teachers to put in the required efforts that would improve their effectiveness [24,25].

Support supervision, as an element of the school internal factor enables teachers to improve their pedagogical skills and competencies, however, we found out that teachers in Lira District rarely received feedback upon assessment [26]. The government of Uganda through the Ministry of education and sports should increase the non-wage budgetary allocations to the education sector to cater for the recruitment of more inspectors and procuring facilities for the mobility of inspectors in Lira District [26]. The Ministry should also provide regular in-service training to headteachers and subject heads on classroom observations and portfolio supervision [26]. In a bid to cope with the limited supervisors, peer-to-peer support supervision could be encouraged among teachers [27].

The teacher mentoring factor was also lacking as per our findings. In Uganda, few formal supports and learning opportunities exist for mentors to learn how to be most effective for their mentees. Like so many aspects of professional teaching,

most mentor teachers must learn on the job and rely heavily on intuition and trial and error to develop their practice [28]. Mentoring service in secondary schools in Lira District needs to be emphasized because professional teacher mentoring builds school culture by supporting teachers' professional growth and psychosocial development across their careers [28]. Mostly reserved for beginning teachers, mentoring relationships are commonly used to develop pre-service teachers and guide new teacher induction [28,29].

5. CONCLUSION

The study showed that school internal factors affect teacher effectiveness in secondary schools in Lira District. This implies the schools' internal factors should be addressed positively to improve teacher effectiveness. There is a need for extensive studies on other factors other than school internal factors that may influence teacher effectiveness in schools and similar studies should be conducted in primary schools and higher institutions of learning in Uganda.

CONSENT

The consent of all participants were 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.

REFERENCES

1. Coyle S, et al. Relationships matter: The protective role of teacher and peer support in understanding school climate for victimized youth. In Child & Youth Care Forum, Springer; 2022.

2. Stronge JH. Qualities of effective teachers. ASCD; 2018.
3. Ogott GO. Relationship between instructional resources and teacher effectiveness in early years education centres in Siaya county, Kenya. Maseno University; 2021.
4. Howard TC, Milner HR. Teacher preparation for urban schools, in handbook of urban education. Routledge. 2021:195-211.
5. Openjuru GL. Government education policies and the problem of early school leaving: The case of Uganda, in *The Burden of Educational Exclusion*. Brill. 2010:15-33.
6. Oryema F. Supervision of teaching and teachers' performance in government-aided secondary schools in Moyo district, Northern Uganda. Uganda Management Institute; 2017.
7. Amandu DI, Kaguhangire MB, Mwesigye E. 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. Uganda Management Institute; 2016.
8. Tashakkori A, Teddlie C, Teddlie CB. Mixed methodology: Combining qualitative and quantitative approaches. Sage. 1998; 46.
9. Seeram E. An overview of correlational research. *Radiologic Technology*. 2019;91(2):176-179.
10. West P. Simple random sampling of individual items in the absence of a sampling frame that lists the individuals. *New Zealand Journal of Forestry Science*. 2016;46(1):1-7.
11. Elfil M, Negida A. Sampling methods in clinical research; An educational review. *Emergency*. 2017;5(1).
12. Yadav SK, Singh S, Gupta R. Sampling methods, in *Biomedical Statistics*. Springer. 2019:71-83.
13. Sharma G. Pros and cons of different sampling techniques. *International Journal of Applied Research*. 2017;3(7):749-752.
14. Bhardwaj P. Types of sampling in research. *Journal of the Practice of Cardiovascular Sciences*. 2019;5(3):157.
15. Etikan I, Musa SA, Alkassim RS. Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*. 2016;5(1):1-4.
16. Roulston K, Choi M. Qualitative interviews. *The SAGE handbook of qualitative data collection*. 2018:233-249.
17. Krefting L. Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*. 1991;45(3):214-222.
18. Mackieson P, Shlonsky A, Connolly M. Increasing rigor and reducing bias in qualitative research: A document analysis of parliamentary debates using applied thematic analysis. *Qualitative Social Work*. 2019;18(6):965-980.
19. Ramli N, Muljono P, Afendi FM. External factors, internal factors and self-directed learning readiness. *Journal of Education and E-Learning Research*. 2018;5(1):37-42.
20. Mupa P, Chinooneka TI. Factors contributing to ineffective teaching and learning in primary schools: Why are schools in decadence? *Journal of Education and Practice*. 2015;6(19):125-132.
21. Mubangizi P. Uganda's new lower secondary school curriculum: Moving towards a competent and quality education system. *Policy Review*; 2020.
22. Altinyelken HK. Curriculum change in Uganda: Teacher perspectives on the new thematic curriculum. *International Journal of Educational Development*. 2010;30(2): 151-161.
23. Daily Monitor. Uganda's President Museveni says no salary increment for arts teachers; 2021.
24. The Parliament of the Republic of Uganda. Public service to streamline salaries of teachers by 2027; 2022.
25. Zikanga DKZDK, et al. Remuneration and job performance of teachers in government aided secondary schools in Western Uganda. *Interdisciplinary Journal of Education Research*. 2021;3(2):10-22.
26. Asaph K. The impact of support supervision to teachers on pupils' academic performance in Uganda: A case study of the primary schools in west division of Mubende Municipality; 2019.
27. Otsu R. Supporting teachers improves children's learning in school through support supervision, I receive feedback". *Unicef*; 2019.

28. Harvard University, G.S.o.E. Teachers Mentoring Teachers: Practices for Powerful Professional Communities; 2023.
29. Moir E, Gless J. Quality induction: An investment in teachers. *Teacher Education Quarterly*. 2001:109-114.

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