



Correlation between Headteacher's Supervision and Academic Achievement in English and Sciences Subject: A Case Study of Ruhango District Secondary Schools, Rwanda

Habiyeze Fidèle¹
Jean de Dieu Amini Ngabonziza²

¹habiyeze2018@gmail.com (0788568796)

²aminingabonziza@yahoo.fr (0788216509)

¹<https://orcid.org/0009-0006-0239-6629>

²<https://orcid.org/0000-0002-0248-6812>

¹University of Kigali, Rwanda

²University of Rwanda

ABSTRACT

This study aimed to determine the meaningful correlation between headteachers' supervision and academic achievement in English and Elementary Sciences and Technology (EST) subject in secondary schools in Ruhango District, Rwanda. It was basically cross-sectional survey which involves quantitative and qualitative methods. It was executed in 10 Secondary Schools in Ruhango District plus analysis of students' performance reports. Data were collected to 113 teachers (70 of English and 43 of EST) in addition to 30 headteachers through questionnaire. Data were analyzed through descriptive statistics through SPSS and Microsoft excel and inferential statistics (Pearson correlation). It showed that headteachers' supervision had a meaningful correlation with teachers' performance in Secondary Schools, Ruhango District. It recommended that all educational authorities, government and other stakeholders should be involved in the monitoring and evaluation of teachers' performance in Secondary School, Ruhango District; headteachers should perform regular supervision to promote assessing measures that encourage the teachers to enhance education quality.

Key terms: Academic Achievement, English and Sciences Subject, Head Teachers' Supervision, Ruhango District, Rwanda, Secondary Schools

I. INTRODUCTION

Supervision of instruction began in United States of America as a series of external evaluation where local agents were engaged to assess both teaching and learning activities. The chief goal was to be connected to the practical side of supervision. Officially and academically, the supervision in education system began with the foundation of the formal school in the late 1830s.

In the middle of the nineteenth century, the increase in number of people in the great cities of the United States of America required the urban school frameworks (Bently, 2005). Educational authorities first assessed schools to see whether teachers were respecting the educational programs and students were assimilating their courses. However, the presence of numerous schools transformed this exercise complex. In this case, the school principal became very important. In addition, in the early decades of the twentieth century, schools were influenced by the movement towards scientific management in both industrial and public administration (Taylor, 1911). At the same time, the schools were also affected by child-centered and experienced-based curriculum theories of European educators such as Friedrich Froebel, Johann Pestalozzi, and Johann Herbart, as well as the prominent American philosopher John Dewey.

Hence, school administrators had a dilemma on what to do either to assess teachers scientifically or to transform the education from a robotic reiteration of instructing conventions to a different repertory of instruction of reactions to students' common interest and different levels of status. This pressure between supervision as a uniform, logical approach to instructing and supervision as an adaptable, dialogic handle between educator and boss including the shared, proficient caution of both were to proceed all through the century (Charry, 2012)

Within the half of the century the field of supervision became clinical supervision. At first created by Harvard teachers Morris Cogan and Robert Anderson and their graduate students, numerous of whom though were teachers of supervision in other colleges, clinical supervision mixed components of "objective" and "scientific" classroom



observation with viewpoints of collegial coaching, level headed arranging, and an adaptable, inquiry-based concern with student learning (Chaula, 2024)

According to Goldhammer (1993) clinical supervision has five stages: a pre-observation conference between supervisor and teacher concerning elements of the lesson to be observed; classroom observation, supervisor's analysis of notes from the observation, and planning for the post-observation conference, post-observation conference between supervisor and teacher and a supervisor's analysis of the post-observation conference.

Cogan (1973) insisted on a collegial relationship focused on the teacher's interest in improving student learning, and on a non-judgmental observation and inquiry process.

At the beginning, clinical supervision immediately was connected to different perspectives coming out of many reforms in education in the United States of America in the 1960s that centered on the different parts of the scholastic rules. In the blink of an eye from that point, points of view created by inquiry about compelling schools and successful classrooms that have supposedly found the essential steps to viable educating took over the clinical supervision handle.

It was during this period that famous teacher Madeline Hunter adjusted inquiry about psychology of learning and presented what was to be ended up as really prevalent, quasi-scientific approach to successful instructing within the 1970s and 1980s. These different understandings of educational modules and instructing were habitually superimposed on the three-to- five-stage process of clinical supervision and got to be standardizing for supervisors' work with teachers. All things considered, in numerous scholastic circles the initial dialogic and intelligent handle of Cogan and Gold hammer continued to shine. But, peer supervision and collegial-teacher leadership through action research in classrooms entered the original process of supervision. This original process of supervision has been subsequently embraced by advocates of peer supervision and collegial-teacher leadership through action research in classrooms (Goldhammer, 1993). Be that as it may, clinical became time-consuming and labor-intensive indeed incomprehensible by the use on any normal premise since of the expansive number of teachers that bosses must supervise and other administrative duties.

The supervisory framework might cycle teachers with proficient status through a three-to five-year period, amid which they would get a formal assessment once and an assortment of other forms of evaluation amid the other a long time (e.g., self-evaluation, peer supervision, educational modules advancement, activity inquired about on unused instructing procedures, association in a school reestablishment venture). The once -a-cycle formal evaluation would require evidence of professional growth. Also, Sergiovanni (1998) attempted to open the work of supervision to intentional involvement with the school wide renewal agenda, thus putting all efforts toward excellent growth including the supervisory system within that larger Indian context.

History of Headteachers' supervision has been presented as a series of disconnected and dissimilar events (Wakutile, 2019). As mentioned in literature, each dominant supervisory theory and practice represented a reaction to the previous phase. In literature available on history of supervision, this common thread of continuation is missing. So, we assist at different models of supervision in different books. Hence, since the history of supervision appears to be diversified, incoherent and unpurified, we have diverse history of supervision, historical treatment of supervision must be found in the literature of education or education administration. The analysis of the historical trends of concepts of supervision will facilitate in finding solutions to evolving and effective system of supervision in education (Thakral, 2015). This can help the practitioners in designing new adaptations of supervision better suited to the modern learning environment. Hence, research can be conducted to develop a model of supervision suitable in Indian context (Wakutile, 2019).

Supervision as a theory and practice has escaped serious and ongoing investigations by educational historians (Sergiovanni, 1998). According to Glanz (2009), a historicism is responsible for the lack of interest in supervision. The dictionary defines a historicism' as disjointed or unrelated to history, historical development or tradition. Many educators and supervisors are very much practice oriented and they assert that historical inquiry has little, if any, effect on day to day practice as cited in Glanz (2009). Not only do practitioners question the usefulness of understanding the past events but they tend to uncritically accept current ideas about supervisory practice that have their origin in the past. Reflective of this notion of "Presentism" for instance is the persistence of bureaucratic authority in supervision. There is lack clarity in even defining supervision. Therefore, supervision lacks focus largely due to the "lack of research and continuing disagreement on the definition and purposes of supervision". Consequently, a lack of clarity as to even the duties has been sensible since around 1920.

This study aimed to find the meaningful correlation between headteacher’s supervision and academic achievement in English and Sciences Subject in secondary schools of Ruhango District on the basis of the following hypotheses:

H₀₁: There is a meaningful effect to headteacher ‘s supervision on student’s academic achievement in secondary schools in Ruhango District.

H₀₂: There is a meaningful effect of supervisory practices and procedures used by the headteachers to enhance academic performance in Ruhango District.

H₀₃: There is a meaningful correlation between headteachers’ supervision and teachers’ assessment and evaluation of learners in Ruhango District.

II. LITERATURE REVIEW

According to Mutai (2018), the relationship between the variables in a study that shows them graphically and diagrammatically constitutes the conceptual framework.

The goal is to make it easy for the reader to understand how the concepts are connected (Orodho, 2014).

This study's conceptual framework showed how headteacher ‘s supervision affects academic achievement. The main variables that influence academic achievement include headteachers’ supervision, school plant and resources and learning and teaching activities, mock examination results, and national examination results, on the side of students and checking notes, lessons plans, and attendance registers, good service delivery on what concerns teachers.

A study by Kimeu (2010), established that the headteachers were inadequately checking the teacher’s professionally records. She suggested that headteachers should be equipped in supervisory methods in improving teacher’s performance.

Another study by Musungu (2008), established that 8% of the principals in high performing school verified lesson books, schemes of work, register of schools’ attendance and class attendance register. Effective principals are those who involved in proper tuition and revision. Ankpa (2019) said: “Through supervision of teachers and students work by proper policy, syllabus coverage, proper testing, instruction, orientation for new employees and teamwork building”, we obtain performance.

For instance, there is” a study on the relationship between instructional supervision and the roles teachers play in ensuring effectiveness in secondary schools in Nigeria”. Sule et al. (2015) in their study revealed that classroom observations positively contributed to teacher effectiveness in a school.

Similarly, Bunijevac (2017) in a study on “the effect of clinical supervision on the teaching performance of secondary school teachers in Malaysia”, relatedly established those formal observations significantly contributed to improved teacher preparation, lesson development, learner assessment and classroom control.

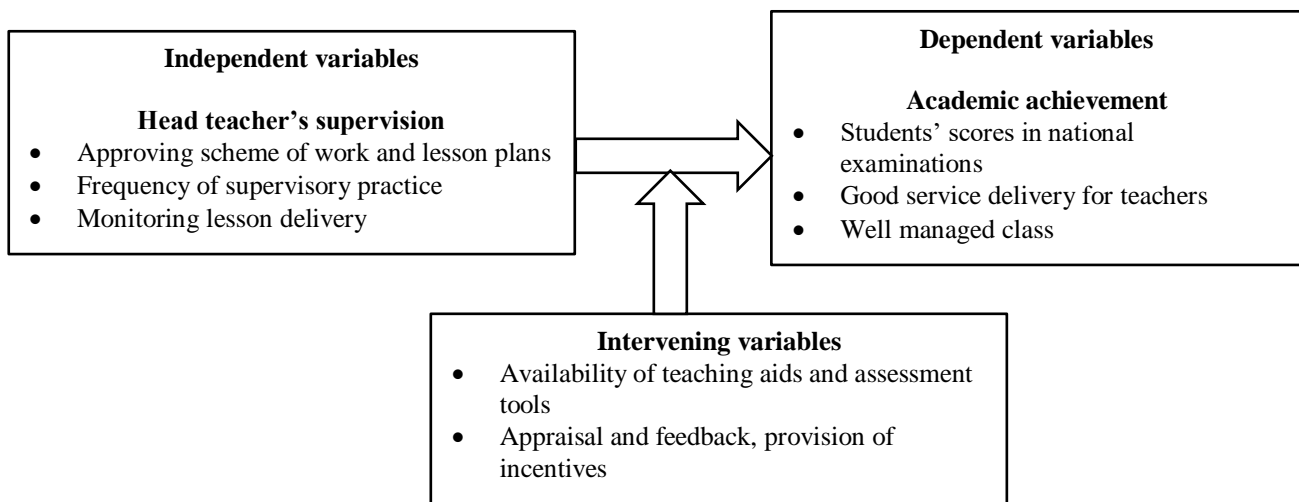


Figure 1
Conceptual Framework



III. METHODOLOGY

Various methods were used to test hypotheses especially to have research design and the sample to collect data and analyze them.

3.1 Research design

A cross sectional survey was used to select respondents across different Secondary Schools in Ruhango District with the purpose of soliciting for their opinions and analyzing and comparing them with another geographical area. The study utilized a mixed method in which both quantitative and qualitative methods of data collection were employed. The qualitative methods used included interviews but the quantitative ones used mainly closed ended questionnaires to investigate the correlation between headteacher’s supervision and academic achievement in English and Sciences Subject in Ruhango District and finally it was found.

3.2 Population and sampling

The study was carried out in 10 Secondary Schools in Ruhango District with a target population of one hundred thirty (130) teachers (80 of English and 50 of EST) and fifty-one headteachers (51) who gave a total of 181 teachers and headteachers plus 1028 students. The total target population is 1209. Thus, the total sample was 113 teachers (70 of English and 43 of EST) plus 30 headteachers. The total is 143 respondents plus students through document analysis.

3.3 Data collection methods

The instruments of data collection as tests, questionnaires, inventories, interview schedules or guides, rating scales, survey plans, or any other forms were used to collect information substantially needed. Secondary and primary data, both were employed in the research to obtain enough, acceptable, and accurate information and collected using a questionnaire, interview, and documentary analysis.

3.4 Data analysis methods

Microsoft office excel and SPSS were used for analyzing the results from the questionnaire and interviews that could be given to the partners such as students, teachers, staff members (Head-Teachers, Dean of Studies, and Dean of Discipline), in order to have the analytical results. On the other side, to effectively explain the research findings, this software was utilized to create graphs.

IV. FINDINGS & DISCUSSIONS

This section is about results and discussion of findings following the hypotheses:

Hypothesis 1: correlation analysis was done between headteacher’s supervision and teachers’ preparation of pedagogical documents. The table below illustrates the results:

Table 1
Correlation between Headteacher’ Supervision and Teachers’ Preparation Of Pedagogical Documents

Variables	Computed index		
Headteachers’ supervision		Headteachers ‘supervision	Teachers’ preparation of pedagogical documents
		1	0.791 **
	Sig.(2-tailed)		0.000
Teachers ‘preparation of pedagogical	Pearson Correlation	0.791 **	1
	Sig.(2-tailed)	0.000	

** .Correlation is meaningful at the (0.01) level (2-tailed), N=113

As indicated in Table above, the Pearson correlation established the correlation between headteachers



‘supervision and teachers’ preparation of pedagogical documents in Secondary School in Ruhango District. The results above show a strong positive meaningful correlation between headteachers’ supervision and teachers’ preparation of pedagogical documents ($r=0.791$, $p=0.000$), the correlation is meaningful because the $P<0.01$ which is the predetermined level of meaning. The study findings did not confirm the null hypothesis as there was an indication of a meaningful correlation between headteachers’ supervision and teachers’ preparation of pedagogical documents in Secondary School in Ruhango District.

The implication of the findings is that headteachers did not effectively supervise teachers while preparing pedagogical documents, hence, poor teachers’ performance in Secondary School in Ruhango District.

Hypothesis 2: correlation analysis was done between headteachers’ supervision and teachers’ classroom instruction and management. The table illustrates the results:

Table 2
Correlation between Headteachers’ Supervision and Teachers’ Classroom Instruction and Management

Variables Computed index		Headteachers’ supervision	Teachers’ classroom instruction and management
Headteachers’ supervision	Pearson Correlation	1	.770**
	Sig.(2-tailed)		.000
Teachers’ classroom instruction and management	Pearson Correlation	.770**	1
	Sig.(2-tailed)	.000	

** . Correlation is meaningful at the (0.01) level (2-tailed), N=113

In Table above, the Pearson correlation established the correlation between headteachers’ supervision and teachers’ classroom instruction and management in Secondary School in Ruhango District. The results above showed a strong positive meaningful correlation between headteachers’ supervision and teachers’ classroom instruction and management ($r=0.770$ **, $p=0.000$), the correlation is meaningful because the $P<0.01$ is the predetermined level of meaning.

The study findings did not confirm the null hypothesis (Catherine, 2017) as there was an indication of a meaningful correlation between headteachers’ supervision and teachers’ classroom instruction and management in Secondary School in Ruhango District. The implication of the findings is that headteachers did not effectively supervise teachers during classroom instruction and management. Hence, we observed poor teachers’ performance in Secondary School in Ruhango District.

Hypothesis 3: correlation analysis was done between headteachers’ supervision and teachers’ assessment and evaluation of learners. The table illustrates the results:

Table 3
Correlation between Headteachers’ Supervision and Teachers’ Assessment and Evaluation of Learners

Variables computed Index		Headteachers’ supervision	Teachers’ assessment and evaluation of learners
Headteachers’ supervision	Pearson Correlation	1	.701**
	Sig.(2-tailed)		.000
Teachers’ assessment and Evaluation of learners	Pearson Correlation	.701**	1
	Sig.(2-tailed)	.000	

** . Correlation is meaningful at the (0.01) level (2-tailed), N=113

In Table above, the Pearson correlation establishes the correlation between headteachers’ supervision and teachers’ assessment and evaluation of learners in Secondary School in Ruhango District. The results above showed a positive meaningful correlation between headteachers’ supervision and teachers’ assessment and evaluation of



learners ($r=0.701$, $p=0.000$), the correlation is meaningful because the $P<0.01$ which is the predetermined level of meaning.

The study findings did not confirm the null hypothesis as there was an indication of a meaningful correlation between headteachers' supervision and teachers' assessment and evaluation of learners in Secondary School in Ruhango District. The implication of the findings is that headteachers did not effectively supervise teachers during assessment and evaluation of learners. Hence, we assisted to poor teachers' performance in Secondary School in Ruhango District.

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusions

This study was aimed to determine the correlation between headteachers' supervision on academic achievement in English and Sciences Subject in secondary schools of Ruhango District. The conclusions were based on the hypotheses as shown below: It was learnt that there was a strong positive meaningful correlation between headteachers' supervision and teachers' preparation of pedagogical documents ($p<0.01$) in Secondary School of Ruhango District. The study therefore concludes that when headteachers' supervision increases, it statistically increases teachers' frequency and efficiency of making the schemes of work, lesson plans, lesson notes and preparation of learning aids in time.

It was also qualitatively observed that effective headteachers' supervision can instill commitment and enhance teachers' enthusiasm to prepare lesson plans, schemes of work, teaching aids, and lesson notes daily. Preparing such pedagogical documents can have a vital role in influencing the learning process. This is because they provide direction towards the attainment of the selected objectives and foster active learning among pupils.

Also, a strong positive meaningful correlation between headteachers' supervision and teachers' classroom instruction and management was found ($r=0.770$, $p<0.01$) in Secondary Schools of Ruhango District. Nonetheless, the study concluded that effective headteachers' supervision could bring about effective learning are use interest, stimulate discussions and raise questions, simplify information and ideas among learners. So, all these can be achieved only when headteachers become effective supervisors so as to see that all the necessary instructional materials are fully utilized.

A strong positive meaningful correlation between headteachers' supervision and teachers' assessment and evaluation of learners ($r=0.701$, $p<0.01$) in Secondary Schools of Ruhango District. In this study, It was learnt that most assessment and evaluation aspects like remedial lessons, homework, lesson exercises and so forth were only carried out in schools where headteachers' supervision existed. It was therefore concluded that headteachers should not only supervise preparation and instruction but also during assessment and evaluation for complete management of teachers' performance. This supervision should be done thrice in a week.

5.2 Recommendations

The findings of the present study are of great meaning but they are not generalizable to all the secondary schools in Ruhango District because of study limitations. It should be seen as a parameter for future research rather than as final answers. We need to examine the correlation between headteachers' supervision and teachers' performance using different research designs, samples and different settings before a definite conclusion can be made as there were some limitations in this study. Hence, we recommended for future researchers to also compare headteachers' supervision and quality of teaching in secondary schools based on rural and urban settings. The researcher would like to recommend that supplementary investigations could be done using longitudinal studies. This can help reveal the causal correlation between headteachers' supervision and teachers' performance.

REFERENCES

- Ankpa, P. (2019). *Staff Time Book, School Timetable, Class Attendance Register & Class management - LeadinGuides Educational Technologies*. Retrieved from academia.edu: <https://www.ijmra.us/project/doc/2018/IJPSS,NOVEMBER2018/IJMRA-14587.PDF>
- Bently, P. W. (2005). *Instructional supervision and gifted education elementary school teachers' perspectives (Doctoral Dissertation, University of Berogia: Berogia)*.
- Bunijevac, M. Đ. (2017). Parental Involvement as a Important Factor for Successful Education. *Ceps Journal*, 7(3),

137.

- Catherine E Hewitt, N. M. (2017). *Listen to the data when results are not significant*. Retrieved from www.ncbi.nlm.nih.gov: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2174757/>
- Charry, K. (2012). *Leadership Theories-8 Major Leadership Theories*. <http://psychology.about.com/od/leadership/theories/>
- Chaula, L. (2024). *Measure for clinical supervision practices as factors of predictive indicators of teachers' professional identity development in Tanzania*. Heliyon.
- Cogan, M. (1973). *Clinical supervision*. Boston, MA: Houghton Mifflin Co.
- Glanz, J. (1995). *Exploring Supervision History: An Invitation and Agenda*. Israel: Michlalah Jerusalem College.
- Goldhammer, R. A. (1980). *Clinical supervision special methods for supervision of teachers*. London, England: Holt, Rinehart & Winston.
- Kimeu, J. (2010). *Influence of secondary school Principals Instructional supervision practices on Kenya Certificate for Secondary Education Performance in Kasikeu Division* (Thesis, Nairobi: University of Nairobi).
- Musungu, L. &. (2008). *The Head teachers' Instructional role in academic achievement in Secondary Schools in Vihiga District, Kenya*. *Educational Research and Review*, 3(10), 3160-323.
- Mutai, J. (2018). *Pioneers in Education*. Kenya: Jomo Kenyatta University of Agriculture and Technology.
- Orodho, J. (2014). *Life Skills Education in Kenya: An Assessment of the Level of Preparedness of Teachers and School Managers in Implementing Life Skills Education in Trans-Nzoia District, Kenya*. *IOSR Journal of Humanities and Social Science*, 32-44.
- Sergiovanni, T. J. (1998). *Supervision: A Redefinition* (6th Ed.). New York: McGraw-Hill.
- Sule, M. A., Ameh, E., & Egbai, M. E. (2015). *Instructional Supervisory Practices and Teachers' Role Effectiveness in Public Secondary Schools in Calabar South Local Government Area of Cross River State, Nigeria*. *Journal of Education and Practice*, 7-9.
- Thakral, S. (2015). *The historical context of modern concept of supervision*. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)*, 6(1), 79-88
- Taylor, F. W. (1911). *The Principles of Scientific Management*. New York and London: Harper & Brothers.
- Wakutile, A. G. (2019). *Head teachers' supervision and teachers' performance in universal primary education schools in Bubulo constituency, Manafwa District, Uganda*. Manafwa District, Uganda (Master's Thesis, Kampala International University, Uganda).