

## Investigating the Relationship between School Leadership and Academic Performance: A Case Study of Secondary Schools in Rusizi District, Rwanda

Idahemuka Magnifique<sup>1</sup>  
Ndayishimiye Jean Damascene<sup>2</sup>

<sup>1</sup>magnifiqueidahemuka@gmail.com (+250788703595)

<sup>2</sup>damasce24@gmail.com (+250788551725)

<sup>1</sup><https://orcid.org/0009-0001-6015-4955>

<sup>2</sup><https://orcid.org/0009-0007-5539-929X>

<sup>1</sup>RP-Kitabi College, <sup>2</sup>Mount Kenya University, Rwanda

<https://doi.org/10.51867/ajernet.6.1.59>

### ABSTRACT

*This paper aimed to investigate the relationship between school leadership and students' academic performance in secondary schools of Rusizi District. To achieve this objective, the research used a descriptive survey design. The investigation was guided by the Transformational Leadership Theory. The study was conducted in Rusizi district in Rwanda. The study targeted 340 individuals including students, teachers, Head Teachers and Deans of Studies (DOSs). The study used a combination of simple random and stratified sampling techniques to select a sample of the study of 220 individual including 155 students, 55 teachers, 5 Head Teachers and 5 DOSs. This sample was selected from five secondary schools of Rusizi district. This paper employed a descriptive research design, utilizing questionnaires and interview guides to collect both qualitative and quantitative data. The collected data were analysed and presented using tables and graphs, applying descriptive statistics such as frequency, mean, percentages and others. Statistical analysis was conducted using the SPSS 22<sup>nd</sup> version software. Qualitative data were analysed, interpreted and presented using extracts, explanations and interpretation. The findings of this study reveal a significant relationship between effective school leadership styles and students' academic performance in secondary schools in Rusizi District, Rwanda. Quantitative data indicate that the majority of students and teachers agree that effective leadership enhances standardized test scores, GPA, completion rates and reduces repetition rates, with high mean scores and consistent standard deviations supporting these views. The study found a strong correlation between school leadership and academic performance ( $r = .854, p < .01$ ). Regression analysis confirmed that 74.1% of the variation in academic performance can be attributed to leadership styles. Furthermore, regression coefficients indicate that school leadership statistically and significantly predicts academic performance ( $B = 0.845, t = 20.917, p < 0.001$ ). Qualitative insights from key informants underscore the role of effective leadership in fostering discipline, motivation, goal-setting, teacher support, and collaboration among stakeholders. These elements collectively create a positive school culture, enhance teaching quality and promote a nurturing environment conducive to academic excellence. The study concluded that effective school leadership styles significantly enhance students' academic performance in Rusizi District, Rwanda. It has recommended that school leaders and teachers have to collaborate to foster discipline, motivation and a supportive learning environment to improve academic performance.*

**Keywords:** Academic Performance, Effective Leadership, School Leadership, Rwanda, Rusizi District, Secondary Schools

### I. INTRODUCTION

Effective school leadership is critical for educational institutions to achieve their objectives, particularly in enhancing students' academic performance. Leadership involves strategic planning, curriculum development, resource allocation, and fostering an inclusive learning environment that promotes academic success and continuous improvement (Bush, 2011). Globally, effective leadership has been shown to significantly influence student achievement by setting high standards, encouraging teacher professional growth, and cultivating a positive school climate (Masudi et al., 2023). Leadership strategies that enhance student engagement, improve instructional quality, and foster a supportive school environment are all linked to higher academic performance (Hallinger & Heck, 1998).

At the continental level, disparities in academic performance persist across Africa due to structural challenges such as teacher shortages, resource limitations, and educational inequalities. In South Africa, historical and infrastructural challenges continue to hinder academic progress (Memela & Ramrathan, 2022). Similarly, Sengendo (2023) reports that in Uganda, academic performance remains a challenge due to various obstacles, including social and financial hindrances. Despite these challenges, Rwanda has made significant strides through government reforms, such as the Nine-Year Basic Education project. However, rural areas in Rwanda continue to face persistent challenges that impact student achievement (Spaull, 2013; World Bank, 2018).

According to the Ministry of Education, Rwanda (2019), low academic performance in Rusizi District remains a critical issue. This low performance affects students' ability to meet academic standards, leading to high dropout rates, poor examination results, and limited opportunities for higher education. Such challenges underscore the need for targeted interventions to address the underlying causes of academic underachievement in the region.

These issues highlight the necessity of focused leadership interventions to raise student achievement, particularly in underprivileged areas (Van der Berg, 2015). Programs like Rwanda's Nine-Year Basic Education project have shown potential, but further research is needed to understand how school leadership can directly impact academic results.

The purpose of this study is to explore how school leadership relates to students' academic achievement in secondary schools in Rusizi District, Rwanda. Although previous research emphasizes the value of leadership in education, there are still gaps in understanding how it specifically affects secondary education and the strategies used by leaders to improve student outcomes. Given the limited context-specific research in Rwanda, this study is essential to gaining a better understanding of how effective leadership practices can alleviate educational inequalities and enhance academic achievement in secondary schools.

### 1.1 Problem Statement

Academic performance in Rusizi District's secondary schools remains below the national average, with only 45% of students meeting national examination pass rates compared to the national average of 63% (Ministry of Education, Rwanda, 2023). This underperformance is linked to challenges in school leadership, including insufficient strategies for promoting discipline, motivation, teacher development and resource management. Globally, effective leadership has been shown to enhance academic performance by fostering vision, staff development and supportive learning environments (Hallinger, 2011; Masudi et al., 2023). However, there is limited research on how leadership specifically impacts secondary education in Rusizi District. This paper seeks to address these gaps by examining the influence of school leadership on academic performance in the district, contributing to efforts to improve educational outcomes.

### 1.2 Research Objectives

The objective of this paper is to investigate the relationship between school leadership and students' academic performance in secondary schools of Rusizi District in Rwanda.

## II. LITERATURE REVIEW

### 2.1 Theoretical Review

This study, guided by Transformational Leadership Theory pioneered by Burns (1978), explores how leadership influences academic performance in Rusizi District, Rwanda. According to Korejan and Shahbazi (2016), this theory has four pillars: idealized influence, inspirational motivation, intellectual stimulation and individualized consideration. These pillars were central to the analysis of the paper. Idealized influence examined how school leaders inspire trust and admiration. Inspirational motivation focused on how leaders communicate visions that drive academic excellence. Intellectual stimulation explored the promotion of creativity in teaching, while individualized consideration highlighted personalized support for growth. These pillars collectively helped in investigating how transformational leadership affects students' academic performance in selected secondary schools of Rusizi district in Rwanda.

### 2.2 Empirical Review

Several empirical studies have delved into the relationship between school leadership and student academic performance, offering diverse perspectives on the impact of leadership styles. Ngcobo (2015) examined the interplay between academic performance, school culture, and leadership in historically disadvantaged township schools in South Africa. The findings highlighted that distributed and context-sensitive leadership practices fostered positive school cultures that enhanced academic outcomes. Similarly, Masudi et al. (2023) reviewed the role of transformational and instructional leadership in influencing student achievement across various contexts, such as the United States, Malaysia, and Kenya. They demonstrated that leadership styles like transformational leadership improved teacher satisfaction and student outcomes, but they also identified challenges such as inadequate professional development for school leaders. Tan and Dimmock (2021), through a meta-analysis of 108 studies, identified that leadership practices like instructional management and stakeholder engagement moderately impacted academic achievement, while factors like socioeconomic status acted as moderators.

However, these studies reveal notable gaps. Ngcobo (2015) emphasized context-specific leadership practices but did not explore the broader applicability of transformational or instructional leadership. Similarly, Tan and Dimmock (2021) and Masudi et al. (2023) conducted their studies in settings like South Africa, Turkey and Malaysia,

which differ significantly from Rwanda in socioeconomic and cultural contexts. Furthermore, the specific challenges of leadership styles in Rwandan districts like Rusizi remain unexplored. These gaps highlight the need for context-specific research, motivating this study to investigate the relationship between school leadership and student academic performance in the secondary schools of Rusizi District, Rwanda, to provide actionable insights tailored to local educational dynamics.

### III. METHODOLOGY

#### 3.1 Study Area

The research area for this study is Rusizi District, Western Province. This area was chosen to obtain reliable information from different schools in different areas. Additionally, Rusizi District is a district that has schools that can represent all types of education available in Rwanda, namely technical secondary schools and general education secondary schools.

#### 3.2 Research Design

The research used a descriptive survey design, collecting data through questionnaires or interviews from a sample of respondents. This design is effective for gathering information on individuals' opinions, attitudes, habits or other educational aspects (Creswell, 2014). Descriptive analysis helped achieve the research objectives, while correlational analysis was employed to investigate the relationship between school leadership and student academic performance in the secondary schools of Rusizi District, Rwanda.

#### 3.3 Target Population

The target population of the study consisted of 340 individuals from 5 secondary schools of Rusizi district in Rwanda. The population of the study included 260 students, 70 teachers, 5 head teachers and 5 Dean of studies, who served as key informants.

#### 3.4 Sampling Procedures and Simple Size

The study employed a combination of stratified and simple random sampling techniques for data collection. Stratified sampling was used by treating each school as a stratum, with teachers selected in proportion to their total number. Within each school, 31 students and 11 teachers were randomly selected, resulting in a total of 155 students and 55 teachers from secondary schools in Rusizi District. Additionally, the study included 5 head teachers and 5 Deans of Studies (DOSs) from the selected schools as key informants. This approach ensured a comprehensive, convenient, and unbiased selection of participants from the district's secondary schools.

#### 3.5 Data Collection

Data collection for the research, conducted in 2024-2025, involved a combination of semi-structured questionnaires and face-to-face interviews. The questionnaires included both open-ended and closed-ended questions to gather quantitative and qualitative data, ensuring a structured approach. Interviews with Head Teachers and DOSs featured open-ended questions, using techniques like paraphrasing and probing to gain a deeper understanding of their perspectives. In addition to primary data from questionnaires and interviews, secondary data were collected through document reviews related to school leadership and academic performance in Rusizi District's secondary schools.

#### 3.6 Data Analysis

In the study, the researcher carefully reviewed all questionnaires to ensure complete data collection. If any essential information was missing, the researcher revisited the field to gather the required data. The collected data were processed using Microsoft Word and analysed with descriptive tables and SPSS for advanced analysis.

Descriptive techniques, including mean, standard deviation, and regression analysis, were used to interpret quantitative data. Qualitative data were analysed, interpreted and presented using extracts, explanations and interpretation.

## IV. FINDINGS & DISCUSSION

### 4.1 Students Views on the Relationship between School Leadership Styles and Students' Academic Performance

The following table presents views of students about the relationship between school leadership styles and students' academic performance in secondary schools in Rusizi district in Rwanda.

**Table 1**

*Students Views on the Relationship between School Leadership Styles and Students' Academic Performance*

Statements	SD		D		N		A		SA		Mean	Std. Dev
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		
Effective school leadership styles can increase my standardized test scores.	3	1.9	6	3.9	23	14.8	67	43.2	56	36.1	4.0	0.9
Effective school leadership can increase my GPA.	4	2.6	5	3.2	15	9.7	57	36.8	74	47.7	4.2	0.9
Effective school leadership styles increase students' completion rate.	3	1.9	11	7.1	14	9.0	53	34.2	74	47.7	4.1	0.9
Effective school leadership styles decrease students' repetition rate.	5	3.2	4	2.6	11	7.1	69	44.5	66	42.6	4.2	0.9

Table 1 indicates that 123 (79.3%) students agreed that effective school leadership styles can increase their standardized test scores with the mean of 4.0 and the standard deviation of 0.9. In addition, 131 (88.5%) students agreed that effective school leadership can increase their Grade Point Average (GPA) with the mean of 4.2 and the standard deviation of 0.9. Moreover, 127 (81.9%) students agreed that effective school leadership styles increase students' completion rate with the mean of 4.1 and the standard deviation of 0.9.

Finally, 135 (87.1%) students agreed that effective school leadership styles decrease students' repetition rate with the mean of 4.2 and the standard deviation of 0.9. This implies that effective school leadership styles can increase students' academic performance in secondary schools of Rusizi district in Rwanda. These findings of our paper do not contradict the findings of Day et al. (2016) who conducted a research about the impact of leadership on student outcomes and found that effective leadership improves students' outcomes.

### 4.2 Teachers' Views on the Relationship between School Leadership Styles and Students' Academic Performance

The following table presents views of teachers about the relationship between school leadership styles and students' academic performance in secondary schools in Rusizi district in Rwanda.

**Table 2**

*Teachers' Views on the Relationship between School Leadership Styles and Students' Academic Performance*

Statements	SD		D		N		A		SA		Mean	Std. Dev
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		
Effective school leadership styles increase students' standardized test scores.	4	7.3	5	9.1	5	9.1	18	32.7	23	41.8	3.9	1.2
Effective school leadership styles increase students' GPA.	2	3.6	5	9.1	3	5.5	22	40.4	23	41.8	4.0	1.0
Effective school leadership styles increase students' completion rate	1	1.8	10	18.2	1	1.8	19	34.5	24	43.6	4.0	1.1
Effective school leadership styles decrease students' repetition rate.	5	9.1	4	7.3	0	0.0	21	38.2	25	45.5	4.0	1.2

Table 2 reveals that 41 (74.5%) teachers agreed that effective school leadership styles can increase students' standardized test scores with the mean of 4.9 and the standard deviation of 1.2. In addition, 44 (81.5%) teachers agreed that effective school leadership can increase students' Grade Point Average (GPA) with the mean of 4.0 and

the standard deviation of 1.0. Moreover, 43 (78.1%) teachers agreed that effective school leadership styles increase students' completion rate with the mean of 4.0 and the standard deviation of 1.1. Finally, 46 (83.7%) teachers agreed that effective school leadership styles decrease students' repetition rate with the mean of 4.0 and the standard deviation of 1.2. The findings from teachers implies that effective school leadership can increase students' academic performance in secondary schools of Rusizi district. According to Broadbent (2017), effective school leadership involves motivating subordinates to perform specific tasks aimed at achieving educational objectives, which are essential for improving academic performance.

### 4.3 Correlation Analysis between School Leadership Styles and Students' Academic Performance

This parts presents the correlation between independent and dependent variables.

**Table 3**

*Correlation Analysis between School Leadership Styles and Students' Academic Performance*

		School Leadership Styles	Students' Academic Performance
School Leadership Styles	Pearson Correlation	1	.854**
	Sig. (2-tailed)		.000
	N	210	210
Students' Academic Performance	Pearson Correlation	.854**	1
	Sig. (2-tailed)	.000	
	N	210	210

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

The Findings from the above table indicate that there is a statistical significance relationship between effective school leadership styles and students' academic performance in secondary schools of Rusizi district since the P-value = .000 which less than 0.01 as the level of significance and Pearson coefficient of correlation (r) is .854\*\* which is very high. This also implies that there is a relationship between school leadership styles and students' academic performance in secondary schools of Rusizi district.

### 4.4 Regression Analysis between School Leadership Styles and Students' Academic Performance

The following tables presents regression analysis between school leadership styles and students' academic performance in secondary schools of Rusizi district in terms of, model summary, analysis of variance (ANOVA) and regression coefficient.

#### 4.4.1 Model Summary

From Table 4 below, the value of Adjusted R Square is .741 and indication that 74.1% of the variation in students' academic performance in secondary schools of Rusizi district can be explained by one level of independent variables (school leadership styles). This implies that there is a strong relationship between school leadership styles and students' academic performance in secondary schools of Rusizi district.

**Table 4**

*Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.832 <sup>a</sup>	.751	.741	.29306

a. Predictors: (Constant), School Leadership Styles

#### 4.4.2 Analysis of Variance (ANOVA)

Table 5 presents that the degrees of freedom are 3.523 and 166.877, the F. Value equals .854 and the significance (P- Value) equals 0.000a. Therefore, the model is significant because the significance (P- Value) is 0.000a which is less than alpha (.05). This implies that application of effective school leadership styles affects students' academic performance in secondary schools of Rusizi district.



**Table 5**  
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.523	11	.881	.854	.000a
	Residual	166.877	109	1.043		
	Total	170.400	210			

a. Dependent Variable: Students' Academic Performance

b. Predictors: (Constant), School Leadership Styles

#### 4.4.3 Regression Coefficient

The findings in Table 6 presents the regression coefficients. The regression equation was  $y = ax + b + \epsilon$  where:  $y$ = dependent variable (students' academic performance) and  $x$ =independent variable (students' academic performance). Therefore,  $y = 0.845x + 0.713 + 0.190$ . This slope is significant since the significance value is .000 which is less than .5. This implies that application of effective school leadership styles affects students' academic performance in secondary schools of Rusizi district.

**Table 6**

Regression Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.713	.190		3.761	.000
	School Leadership Styles	.845	.040	.854	20.917	.000

a. Predictors: (Constant), School Leadership Styles

#### 4.5 Key Informants' Teachers' Views on the Relationship between School Leadership Styles and Students' Academic Performance

After analysing, presenting, and interpreting the quantitative data, this section focuses on the analysis, presentation, and interpretation of qualitative data gathered from key informants, including Head Teachers and Deans of Studies (DOSs) from selected schools in Rusizi District. Interviews were conducted to obtain valuable insights, centered on the question: "What are the effects of effective school leadership styles on students' academic performance in your secondary school?" The following responses were provided:

One of key informant said:

*"Effective school leadership plays a critical role in establishing an environment where students and teachers can thrive. By promoting discipline, leaders ensure that rules and regulations are adhered to, minimizing distractions and fostering a focused atmosphere conducive to learning. Additionally, motivated teachers are more likely to deliver high-quality instruction, while motivated students are better engaged in their studies. Together, these factors create a positive school culture that encourages academic excellence."* (Respondent B, 2024)

This response highlights the importance of discipline and motivation as foundational elements of effective leadership. It suggests that when leaders prioritize these aspects, they set the stage for improved academic outcomes by creating a stable and supportive learning environment. This underscores the direct link between leadership strategies and the overall performance of both teachers and students.

Another key informant said:

*"Effective school leadership styles ensures clear goals that give teachers a sense of direction and purpose that help them to aligning their efforts with the broader vision of the school. Effective school leaders ensure that teachers have access to the resources and support they need to meet these objectives. This includes regular feedback, professional development opportunities, and open communication. By maintaining high teaching standards, leaders ensure that students receive a quality education, which is reflected in their academic performance."* (Respondent D, 2024)

This response emphasizes the role of goal-setting and teacher support in achieving educational success. It suggests that effective leadership is not only about setting expectations but also about actively supporting teachers to meet those expectations. The result is a sustained improvement in teaching quality, which has a direct positive effect on student academic performance.

Moreover, another key informant highlighted the relationship between school leadership styles and students' academic performance by providing the following information:

*"Effective leadership style in a school promotes collaboration which is a cornerstone of improved students' academic performance. By fostering strong relationships among teachers, students, and*

parents, school leaders build a sense of community and shared responsibility for student success. Teachers are encouraged to work as a team, students feel supported both academically and emotionally, and parents become active participants in their children's education. This holistic approach creates a nurturing environment that positively influences academic outcomes." (Respondent A, 2024)

This response underscores the value of collaboration as an essential component of effective school leadership. It shows that when leaders actively engage all stakeholders, they create a unified support system that benefits students academically and socially, leading to better performance and overall success.

Generally, the findings from the key informants indicate that effective school leadership significantly improves students' academic performance in secondary schools of Rusizi District. This is because effective leadership fosters discipline, motivation, clear goal-setting, teacher support, and collaboration among all stakeholders. The findings of the current study align with those of previous research, such as Broadbent (2017) who concluded that effective school leadership has a significant and positive impact on student outcomes by influencing teacher practices and the school environment.

## V. CONCLUSION & RECOMMENDATIONS

### 5.1 Conclusion

The results of this study highlight a strong link between effective school leadership styles and students' academic performance in secondary schools in Rusizi District, Rwanda. The quantitative data show that most students and teachers believe effective leadership positively influences standardized test scores, GPA, graduation rates, and lowers repetition rates, with high mean scores and consistent standard deviations supporting these findings. The analysis reveals a strong correlation ( $r = .854$ ,  $p < .01$ ), and regression results indicate that leadership styles account for 74.1% of the variance in academic performance, with a statistically significant regression equation ( $y = 0.845x + 0.713 + 0.190$ ). Qualitative feedback from key informants emphasizes the importance of effective leadership in promoting discipline, motivation, goal-setting, teacher support, and collaboration, which together help create a positive school culture, improve teaching quality, and foster an environment that supports academic excellence. These findings are consistent with existing research, reinforcing the idea that effective school leadership plays a vital role in enhancing student outcomes.

### 5.2 Recommendations

School leaders in Rusizi District should focus on fostering discipline, motivation, and collaboration to enhance academic performance. Teachers should align their methods with the school's leadership vision, ensuring active student engagement and support for academic excellence. Both should work together to create a positive, supportive learning environment.

## REFERENCES

- Broadbent, J. (2017). Comparing online and blended learners' self-regulated learning strategies and academic performance. *Internet and Higher Education*, 33(3), 24–32.
- Burns, J. M. (1978). *Leadership*. Harper & Row.
- Bush, T. (2011). *Theories of educational leadership and management* (4th ed.). Oxford University Press.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications.
- Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies to make a difference. *Educational Administration Quarterly*, 52(2), 221–258. <https://doi.org/10.1177/0013161X15616863>
- Hallinger, P. (2011). Leadership for learning: Does leadership make a difference? *Educational Management Administration & Leadership*, 39(2), 193–216. <https://doi.org/10.1177/1741143210392050>
- Hallinger, P., & Heck, R. H. (1998). Exploring the principal's contribution to school effectiveness: 1980–1995. *School Effectiveness and School Improvement*, 9(2), 157–191. <https://doi.org/10.1080/0924345980090203>
- Korejan, M. M., & Shahbazi, H. (2016). An analysis of the transformational leadership theory. *Journal of Fundamental and Applied Sciences*, 8(3), 452–461. <https://doi.org/10.4314/jfas.v8i3s.192>
- Masudi, K. A., Muhammad, T., & Rahim, A. (2023). A review of the impact of school leadership on students' academic performance. *INOSR Arts and Humanities*, 9(2), 26–31. <https://doi.org/10.59298/INOSRAH/2023/2.4.4000>
- Memela, R., & Ramathan, L. (2022). Exploring leadership strategies to improve academic performance in underperforming schools in South Africa. *South African Journal of Education*, 42(3), 1–10.



- Ministry of Education, Rwanda. (2019). *Education sector strategic plan (ESSP) 2018/19–2023/24*. Ministry of Education.
- Ministry of Education, Rwanda. (2023). *Annual education statistics report*. Ministry of Education.
- Ngcobo, S. (2015). Leadership practices and academic performance in township schools. *Journal of Education Studies*, 13(2), 45–56.
- Sengendo, J. (2023). Challenges in academic performance in Ugandan secondary schools. *Journal of African Educational Studies*, 11(3), 33–45.
- Spaull, N. (2013). South Africa’s education crisis: The quality of education in South Africa (1994–2011). *Centre for Development and Enterprise*, 2(5), 345–352.
- Tan, C. Y., & Dimmock, C. (2021). Leadership and academic performance: A meta-analysis of leadership strategies in schools. *Educational Management Administration & Leadership*, 49(4), 611–630. <https://doi.org/10.1177/1741143220906144>
- Van Der Berg, S. (2015). Educational inequalities in South Africa. *Development Southern Africa*, 32(5), 1–17. <https://doi.org/10.1080/0376835X.2015.1086934>
- World Bank. (2018). *Rwanda: Enhancing education for development*. World Bank.