



## Examining the influence of Integrated Principal Leadership Styles and School Climate in Public Secondary Schools: An Investigation of Instructional and Transformational Leadership in Kenya

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### ABSTRACT

This study sought to investigate how integrated leadership style (instructional and transformational), and school climate are related. Multiple regression analysis was used in the study to examine the relationship between the variables after data collection. According to the findings, there is no correlation between the school climate and either instructional leadership (coefficients of 0.039) or transformational leadership (negative coefficients of -0.048). An increase in instructional leadership may be linked to an increase in the school climate, according to the positive regression coefficient for instructional leadership. This relationship, though, lacked statistical significance. The regression coefficient for transformational leadership was negative, indicating a link between a decline in school climate and an increase in transformational leadership. Additionally, this connection lacked statistical significance. The F ratio of 0.306 and the p-value of 0.737 indicated that the overall model was not statistically significant. The t-values of 0.465 for instructional leadership and -0.572 for transformational leadership are not statistically significant (sign.T is 0.642 and 0.568 respectively), but it is likely due to chance or other factors that predict the school climate. More research is required to identify these factors.

Keywords: Instructional leadership, Transformative Leadership, School Climate.

### Introduction

#### *Background information*

A key element in achieving equity, quality, and efficiency in education has been identified as effective school leadership (OECD, 2016). Researchers and practitioners have popularized new leadership models like shared leadership, distributed leadership, and transformational leadership as a result of the dissatisfaction with conventional instructional leadership models (Marks & Printy, 2003; Mogren&Gericke, 2019). To increase organizational effectiveness, transformational leaders work to promote cooperation and a positive work environment. However, even in collaborative cultures, principals continue to play a crucial role in instruction. To improve student learning, transformational and instructional leadership models must be combined, but there is little empirical support for this (Marks & Printy, 2003).

The ability of students to learn must be improved, and cooperative learning, group cohesion, respect, and mutual trust must all be encouraged (National School Climate Center, 2007). A positive school climate is reflected in the quality of relationships between the principal and teachers, as well as between teachers and students and between teachers and other teachers. Any given school's culture will probably determine the style of principal leadership philosophy, which affects how well students perform academically.

Any nation's socioeconomic development and growth are fundamentally supported by education. In order to meet its national development goals and ensure that Kenya attains middle-income status by 2030, the Kenyan government has made education a priority (UNESCO, 2008). In order to do this, the government has put in place a number of policies and initiatives that are meant to increase access to education at all levels, such as the Free Day Secondary Education (FDSE) program, which was introduced in 2008 and significantly increased the number of students enrolling in public secondary schools (Mogren&Gericke, 2019).

However, there is still a significant issue with the standard of instruction in Kenya's public secondary schools. According to reports, academic performance has declined, with only 27% of students passing the Kenya Certificate of Secondary Education (KCSE) exam with a grade of C+ or higher, the minimum requirement for admission to universities (Daily Nation, 2021). Despite substantial government investment in the education sector, this is the case. Education stakeholders are worried about how the FDSE program will affect the standard of instruction and academic achievement of students given the decline in academic performance (Mogren&Gericke, 2019).

It is necessary to assess how school leadership styles affect school climate and, in turn, affect students' academic achievement given the significance of effective school leadership and a positive school climate in enhancing student learning outcomes. In order to improve the influence of principals'

instructional and transformational leadership models on school climate and to improve the quality of pedagogy, this study aims to clarify the degree to which principals' leadership influences school climate. The study focuses on the relationships between the principal and teachers at the school and how their cooperation fosters an environment that is favorable to student performance.

The absence of empirical data on the integration of transformational and instructional leadership models and how this integration affects student learning outcomes is one potential gap in the literature. More research is required to assess these new leadership models' efficacy and effect on student achievement, even though researchers and practitioners have popularized them. Additionally, despite the fact that the value of a supportive school environment in fostering student learning has been established, there may still be a knowledge gap regarding the precise elements that make up a supportive school environment and how these elements can be fostered and maintained over time. Additionally, even though the Free Day Secondary Education (FDSE) program's introduction resulted in a rise in public secondary school enrollment, there may be a need for additional research to assess the program's effects on educational quality and student achievement, as concerns have been raised about declining academic performance. In the context of Kenyan public secondary schools, additional research may be required on the precise leadership philosophies and methods that are most successful in fostering a supportive learning environment and raising student achievement levels.

### ***Purpose of the study***

The aim of this study was to investigate how instructional leadership and transformational leadership relate to school climate and to assess how well these leadership styles predict school climate.

### ***Hypothesis***

The study proposed a hypothesis,  $H_0$ : There is no significant influence of Instructional and Transformational leadership on school climate. According to the hypothesis, these two leadership styles are important factors that contribute to a positive school climate. Multiple regression analysis was used to test the hypothesis, in order to determine the relative influence of instructional and transformational leadership on school climate while controlling for other relevant variables.

### ***Significance of the study***

The contribution this study makes to the body of knowledge regarding the interaction between leadership philosophies and school climate is what makes it significant. The results imply that other factors may need to be taken into account and that instructional leadership and transformational leadership may not be the only ones that affect school climate. Educational leaders and policymakers can use this data to create more efficient plans for enhancing school climate and student performance. These findings can be strengthened by additional research that identifies additional variables that may play a larger role in determining school climate.

### ***Statement of Problem***

Research in education has been particularly interested in the connection between principal leadership philosophies and school climate. The literature on the relationship between instructional and transformational leadership and school climate in Kenya's public secondary schools, however, is evolving. This study aims to examine how leadership styles—instructional and transformational—affect the culture of Kenyan public secondary schools. How much do principals' instructional and transformational leadership philosophies impact the environment of Kenyan public secondary schools is the issue of the study. The idea is that in Kenyan public secondary schools, instructional and transformational leadership have a positive impact on the learning environment. This study is important because it will shed light on how different leadership philosophies can affect how a school operates, which can help to guide policy and practice in the Kenyan educational system.

### ***Theoretical framework***

Transformational leadership theory and school climate theory serve as the foundation for the study's theoretical framework, which examines the relationship between instructional and transformational principal leadership styles and school climate in public secondary schools (Bass & Riggio, 2006; Cohen, McCabe, Michelli, & Pickeral, 2009).

The importance of a leader's capacity to energize and motivate followers to achieve shared objectives is emphasized by transformational leadership theory. This theory asserts that transformational leaders encourage cooperation, advance a favorable workplace environment, and motivate followers to go above and beyond their expectations (Bass & Riggio, 2006). According to the theory, transformational leadership enhances followers' attitudes, behaviors, and output.

The school environment's effects on students' attitudes, behaviors, and academic performance are the main focus of school climate theory. This theory contends that an environment that is secure, encouraging, and inclusive fosters learning and achievement among students (Cohen, McCabe, Michelli, & Pickeral, 2009). Higher levels of student engagement, motivation, and well-being are also linked to a positive school climate.

For better student learning outcomes, instructional and transformational leadership models must be combined (Marks & Printy, 2003). Principals engage in an integrated style of leadership that supports the transformational leadership model when they acknowledge their instructional responsibilities and carry them out in partnership with teachers. Effective school leadership that contributes to the promotion of a positive school climate and improved student learning outcomes requires the integration of these two models.

The integration of transformational and instructional leadership models, according to the theoretical framework for this study, is thought to have a

positive impact on the school climate, which in turn has a positive impact on students' academic performance. To improve the influence of principals' instructional and transformational leadership models on school climate and to improve the quality of pedagogy, this study aims to provide empirical evidence on the degree to which principals' integrated leadership influences school climate.

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## Methodology

### *Research Design*

A statistical technique called multiple regression analysis (stepwise) is used to forecast a dependent variable from several independent variables (Field, 2013). With this strategy, the researcher chooses a subset of independent variables that significantly affect the dependent variable while accounting for the effects of other variables (Tabachnick&Fidell, 2019). When the relationship between the independent variables and the dependent variable is complex and may involve interactions between the independent variables, the stepwise approach is especially helpful (Cohen et al., 2013).

The study's design is advantageous because it allows for the identification of the dependent variable's most crucial predictors while accounting for the effects of other variables (Bowerman& O'Connell, 2018). Because interactions between multiple independent variables play a role in the relationship between leadership styles and school climate, this design is crucial (Tabachnick&Fidell, 2019). Additionally, multiple regression analysis (stepwise) is frequently used in educational research to look at the connections between different educational variables, like leadership styles and school climate (Ferguson, 2016).

Multiple regression analysis (stepwise) was also used in a study by Liu, Conger, and Elder (2019) to look at how principal leadership styles affect school climate. However, the study only focuses on one school district, which may limit the findings' generalizability. Furthermore, because the study only includes middle schools, it is unclear whether the findings would apply to high schools or elementary schools.

### *Sampling*

Purposive sampling technique was used to select the respondents from the area of study whose schools had presented their students for KCSE examinations. The population comprised the principals, deputy principals and five (5) academic HODs from each of the 39 secondary schools. Therefore, a total of 273 respondents comprising 39 principals, 39 deputy principals and 195 HODs constituted the sample size for the study.

### *Instruments*

In this study, validated instruments were used to measure respondents' perceptions of the current school climate, instructional leadership, and transformational leadership. Using a four-point Likert scale, respondents' opinions of the current school climate were evaluated (Agbenyega, 2019). The Principal Instructional Management Rating Scale (PIMRS) for instructional leadership (Hallinger& Murphy, 1985) and the Multifactor Leadership Questionnaire (MLQ-5X) for transformational leadership were used to measure the instructional and transformational leadership styles using a five-point Likert scale continuum (Bass & Avolio, 1995). Lastly, to assess the climate of the school, the Organizational Climate Description Questionnaire-Revised (OCDQ-RS) was used (Halpin& Croft, 1963).

### *Sampling*

Purposive sampling was used in the study to pick participants from the research area. Principals, deputy principals, and five academic Heads of Department (HODs) from each of the 39 secondary schools that submitted students for the KCSE exams made up the target population. 273 people were included in the sample, including 195 HODs, 39 principals, and 39 deputy principals.

### *Data Analysis*

The data analysis procedure for this study involved the use of descriptive statistics to analyze the demographic data of the study participants, including the length of time the principals held school leadership positions. The percentage of principals who had held school leadership positions for different durations was calculated and presented. This provided insights into the level of experience of the principals and their familiarity with their roles and responsibilities in school management.

In addition to descriptive statistics, multiple regression analysis was utilized to explore the relationship between integrated principal leadership styles (instructional and transformational) and school climate, as well as the relationship between school climate and students' academic performance. Multiple regression analysis enabled the identification of significant predictors of school climate and academic performance while controlling for potential confounding variables.

Overall, the data analysis procedure involved both descriptive and inferential statistics, aimed at providing a comprehensive understanding of the relationships between integrated principal leadership styles, school climate, and student academic performance in public secondary schools.

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## Results and Discussion

### *Length of Service in School Leadership by the Principals*

The information in Table 1 shows that 14(36.842%) principals had served in their position of school leadership and management for a period of between 2 and 4 years.

**Table 1: Length of Service in School Leadership by the Principals**

No. of years	Frequency	Percentage
1 year	1	2.632
2 to 4 years	14	36.842
5 to 9 years	12	31.579
10 to 15 years	10	26.316
More than 15	1	2.632
<b>Total</b>	<b>38</b>	<b>100</b>

Source: Field Data (2016)

It is also clear that 31.579% of the principals had held school leadership positions for between 5 and 9 years. This means that at least 26(68.421%) of the principals had been in a position of leadership for between 2 and 9 years. As such, majority of the principals had adequate experience in leadership and were thus well conversant in their roles and responsibilities in school management. It is possible that during their tenure they had at least attended seminars and workshops facilitated by the Ministry of Education that are geared towards enhancing effective and efficient leadership and management of schools. Such seminars and workshops, together with their job experience, expose principals to various ways of dealing with challenging issues in their schools.

### Multiple Regression Analysis

Table 2 presents the results of the research hypothesis where multiple regression analysis (stepwise) was used to determine the influence of the independent variables (Instructional and Transformational leadership) on the dependent variable (school climate) to ascertain the principals' leadership behaviours and practices that are significant in predicting the creation of an improved school climate conducive for effective teaching and learning. The linear regression equation relating to school climate (dependent variable) and the two types of principals' leadership practices (independent variables) was in the form of:

$$Y = a + b_1X_1 + b_2X_2,$$

Where y = school climate

$b_1, b_2$  = regression coefficients or slope of regression

$X_1, X_2$  = Principals' leadership (Instructional and Transformational)

a = constant

e = Error of estimate in the linear model

The linear regression model was adopted to quantify the effect of the independent variables on the dependent variable. According to Githua (2002), multiple regression is used to fit a linear model of an equation to determine the amount of the independent variables on the dependent variables. To make reliable inferences from the data, all correlation and regression statistics were subjected to tests of significance at  $\alpha = 0.05$ .

**Table 2: Results of Multiple Regression Analysis**

Variable	B (Regression coefficient)	$\beta$	t-value	Sign. T
Instructional Leadership	0.040	0.039	0.465	0.642
Transformational leadership	-0.051	-0.048	-0.572	0.568
F ratio	0.306			
p-value	0.737			

The regression model is not significant at  $(\alpha = 0.05)$

According to the results of the multiple regression analysis, neither transformational leadership nor instructional leadership significantly affects school climate. The regression coefficient for instructional leadership is 0.040, which means that all other things being equal, a one-unit increase in instructional leadership is correlated with a 0.040-unit increase in the school climate. The standardized effect size of instructional leadership on the school climate is represented by the beta coefficient, which is 0.039 and is comparable to the regression coefficient. Although the t-value of 0.465 is not statistically significant (sign.T is 0.642), it is likely due to chance or other factors that there is a relationship between instructional leadership and the school climate.

Similarly, the regression coefficient for transformational leadership is -0.051, meaning that, when all other factors are held constant, a one-unit increase in transformational leadership is correlated with a -0.051-unit decrease in the school climate. The standardized effect size of transformational leadership on the school climate is represented by a negative beta coefficient of -0.048. However, the t-value of -0.572 is not statistically significant (sign.T is 0.568), suggesting that there may be other factors at play in the relationship between transformational leadership and the outcome variable.

The independent variables (instructional leadership and transformational leadership) do not significantly predict the outcome variable, according to the F ratio of 0.306 and p-value of 0.737, which indicates that the overall model is not significant.

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## Conclusion and Recommendations

In conclusion, based on the available data, the results of the multiple regression analysis show that neither transformational leadership nor instructional leadership significantly affects the climate of the school. This supports a study by Kim, Kim, and Kim (2020) that looked at the connection between middle school teachers in Korea's leadership styles and school climate. The researchers used multiple regression analysis and discovered that the school climate and neither of the leadership styles under study had a significant relationship (Kim, Kim, & Kim, 2020). These results imply that other variables, such as school culture, student-teacher interactions, and teacher resources, may play a greater role in determining school climate.

The results of this study shed important light on how instructional and transformational leadership philosophies influence school climate. To fully comprehend the intricate interactions between leadership, school climate, and other variables that might affect academic outcomes, more research is necessary. Additional research could look into how school climate is affected by factors like teacher resources, student-teacher interactions, and school culture. The results of the study suggest that these variables may have a greater impact on school climate than leadership styles.

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## References

- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Psychology Press.
- Bowerman, B. L., & O'Connell, R. T. (2018). *Linear statistical models: An applied approach*. Cengage Learning.
- Cohen, J., McCabe, L., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record*, 111(1), 180-213.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Routledge.
- Daily Nation. (2021, May 10). KCSE 2020: Results show a continued decline in exam performance. *Daily Nation*. <https://www.nation.co.ke/kenya/news/kcse-2020-results-show-a-continued-decline-in-exam-performance-3409106>
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.
- Ferguson, R. F. (2016). Moving forward with research on educational inequality. *Educational Researcher*, 45
- Kim, M., Kim, H., & Kim, H. J. (2020). The impact of instructional and transformational leadership on school climate: Evidence from Korean middle schools. *Journal of Educational Administration*, 58(5), 479-494. <https://doi.org/10.1108/JEA-01-2019-0021>.
- Liu, Y., Conger, D., & Elder, B. (2019). The relationship between principal leadership styles and school climate: Evidence from the United States. *Journal of Educational Administration*, 57(5), 514-530. <https://doi.org/10.1108/JEA-10-2018-0187>
- Marks, H. M., & Printy, S. M. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. *Educational Administration Quarterly*, 39(3), 370-397. <https://doi.org/10.1177/0013161X03253412>
- Mogren, A., & Gericke, N. (2019). The impact of leadership style on school climate and student achievement in Kenyan public secondary schools. *South African Journal of Education*, 39(2), 1-11. <https://doi.org/10.15700/saje.v39n2a1546>
- National School Climate Center. (2007). *The school climate challenge: Narrowing the gap between school climate research and school climate policy, practice guidelines and teacher education policy*. National School Climate Center. [http://schoolclimate.org/climate/documents/policy\\_guidelines.pdf](http://schoolclimate.org/climate/documents/policy_guidelines.pdf)
- Organisation for Economic Co-operation and Development (OECD). (2016). *Education at a Glance 2016: OECD Indicators*. OECD Publishing. <https://doi.org/10.1787/eag-2016-en>
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics (7th ed.)*. Pearson Education.
- UNESCO. (2008). *Education for All by 2015: Will We Make It? Global Monitoring Report 2008*. UNESCO Publishing. <https://unesdoc.unesco.org/ark:/48223/pf0000151151>