



## **Does School Administrative Culture influence Students' Academic Performance? Evidence from Public Secondary Schools in Makueni County**

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### **Abstract**

*The principal objective of this empirical investigation was to investigate whether the school administrative culture influences students' academic performance. To evaluate the envisioned linkage, the study utilized cross-sectional data collected using a questionnaire and data collection sheet from 114 secondary schools. Mission statement, vision statement, adhocracy culture and market oriented culture were modeled as the indicators of school administrative culture while the form four KCSE results was used as a measure for student academic performance which was the outcome variable. These indicators were adopted from the prior empirical works. The findings of this study suggest that school administrative culture positively and significantly influences the students' academic performance. The estimation method applied in this study was ordinary least squares (OLS) since it captures very well the cross-sectional aspects of the gathered dataset. This study made significant contributions to theory propagation, policy implication as well as management practice.*

**Keywords:** school administrative culture, students' academic performance, ordinary least squares.

### **1.1 Background of the Study**

Over the past decade, the concept of organizational administrative culture has gained an overwhelming traction as a mechanism to apprehend the human behaviour. Drawing from open systems viewpoint, every element of institutional culture is construed as a vital environmentally relation circumstance influencing the system and its constituent sub-systems (Barrow, 2016). As a result, evaluation of institutional culture is a significant assessment tool (Bart, 2014). Institutional culture is a

configuration of mutual elementary assumptions that the group inculcated as it resolves its inherent challenges of internal integration and external adaptation that augured well to be passed to the new members as the appropriate avenue to think, feel and perceive with respect to the highlighted challenges (Gamache & Benson, 2019).

As suggested by Delpit (2016), exemplary institutional performance is seen as a resilient culture. A positive institutional culture has a huge potential of making an average person to perform and accomplish better while a negative an institutional culture may demoralize an exception staff to perform below average and end up with little accomplishments (Baker & Stevenson, 2016). The school administrative culture is the set of shared norms, beliefs and values that affects the, manner in which the staff feel, think and conduct themselves at the work station(s). Institutional culture has four functions: permits affiliates identity value, augments their institutional commitment, buttresses institutional values and acts as a buffer for shaping human conduct (Malot, 2016).

According to Ayot and Lillis (2016), when the school administrative culture is not aligned or oriented towards learning, then student performance often suffer. Incidentally, the school heads are responsible for instituting a ubiquitous culture of teaching and learning in the school set up (Chambers, 2019). The schools should produce and offer a culture that supports learning process. Principally, all institutions, particularly schools augment academic performance by nurturing a shared system of folkways, norms, traditions and values. These instill the institutions with purpose alongside passion (Bafile, 2016).

## 1.2 Research Problem

Among the public schools in Makueni County, some schools are doing better compared to others in terms of academic excellence. Usually, formal education is considered as a significant instrument for accomplishing individual, social, economic, political and cultural progression for pupils (Eshiwani, 2016). Exemplary KCSE performance is an indicator for quantifying success in secondary school education which is a fundamental necessity for selection into universities and tertiary institutions.

The KCSE results of the years 2011-2013 indicates that Makueni County was performing fairly well with a mean grade of C+ but the mean grade has progressively dwindled from the year 2013 up to 2021 with the current mean score being C-.

On the basis of the university entry points of C+, this implies that students joining institutions of higher learning (university) from the county have progressively plummeted from grade C+ during the period 2012-2016 to grade C- from the years 2017-2020. The deteriorating students' academic performance in Makueni County from grade C+ to a mean grade of C- in 2017-2020 suggests that a greater number students are not in a position to join higher training at the university.

Notably, there is a bulk of empirical works on the influence of other distinct factors such as leadership style and discipline among others, on KCSE performance among many pupils. For Makueni County in particular, manifold empirical inquiries have been undertaken on numerous factors influencing secondary school performance. For instance, Fox, (2013) studied on the influence of instructional materials on students' performance whereas Mumo, (2014) probed the influence of instructional supervision on students' academic performance in Makueni County.

Therefore, the presence of a robust or fragile institutional culture in schools remains to be an integral driver for academic success or failure. The vision statement, the mission statement, adhocracy, market orientation as well as leadership of public schools are the key pillars of the school administrative culture and this has implication on the student academic performance. This study endeavors to bridge the highlighted research gaps by answering the research question: does the school administrative culture influences the students' academic performance?

### **1.3 Research Objective**

The purpose of the study is to determine whether the school administrative culture influences the students' academic performance among the public secondary schools in Makueni County.

### **2.1 Theoretical Literature**

The link between the school administrative culture and the student academic performance is anchored on organizational culture and organizational configuration theories. The Organizational culture theory fronted by Cameron and Quinn (2009) proposes four categories of institutional culture, specifically adhocracy, hierarchy, market and clan. Notably, there is a glaring variation between these four types of institutional cultures. The adhocracy related culture underscores production outcome that is novel and undertakes transformation. The institution exhibits a vibrant and ingenious place. Institutional members are ready to assume inherent risks and its management has extraordinary innovative ideas. The primary focus is on growth and needs new resources.

Market culture lay emphasis on perfection in implementation any assignment. The members of an entity compete to accomplish identified goals since winning is the

ultimate objective. They are mainly concerned with success and reputation capital in accomplishing goals and targets like in a school set-up (Cheung, Wong, & Wu, 2011). Hierarchy culture is a structures and formal establishment where keeping silkiness of an entity is the primacy. Formal rules and policies in different methods unify the firms. Institutional success is delineated by smooth scheduling and task implementation which is under control and cheap human capital which focuses on job guarantees. Overall, the culture adopted by any organization or institutions has an impact in its long term success.

## **2.2. Empirical Literature**

An empirical investigation by Dermol (2012) studied the link between mission statement and the organizational performance utilizing a sample size of 394 in Slovenia. The study probed the link between mission statement presence and the constituents of the mission statement, and how the mechanisms relate to the corporate performance.. The mission statement was proxied by the associations, and organizational resources whereas performance was measured by the value added per employee (VAE). The findings suggest that the mission statement positively influences the organizational performance. However, the study was undertaken in a developed market setting which is inherently characterized by unrivaled economic, social and regulatory environment.

A study by Williams, Morrell, and Mullane (2014) assesses the top management commitment on an entity's mission statement and performance. The findings affirmed a direct association between mission statement and performance is the most essential before the moderating relationship is explained. It is expected that the mission statement should positively impact on the performance of an organization. Similar findings are reported by Malot (2016) who suggested that corporate missions have a

insightful influence on the organizational health by assisting them adapt to changes. (Malott, 2016). The mission acts as a compass to keep the organization on course in a continuously varying environment and, consequently, evade the activity trap.

As suggested by Loomley (2019), the adhocracy culture is a situation where the organization inclines towards the flexible end, but it is additionally superficially focused. The primary objective of such an entity is to generate; adaptableness and agility is invigorated and the outcome is a high magnitude of innovation. Groups or teams are hastily instituted and disbanded in the best interest of the whole (Fox, 2013).

According to Shariff (2012), a resilient corporate case for the implementation of adhocracy cultures as such policies contribute to increased productivity, enhanced organization commitment, greater job satisfaction, superior financial performance, and improved labor retention. Nonetheless, these outcomes are exceedingly contingent upon successful implementation of the policy. While revising and reviewing current corporate actions, distinctive attention paid to management support, instituting a wide-ranging culture, and incorporating informal flexibility within the organization may go a long way to yielding sustainable outcome.

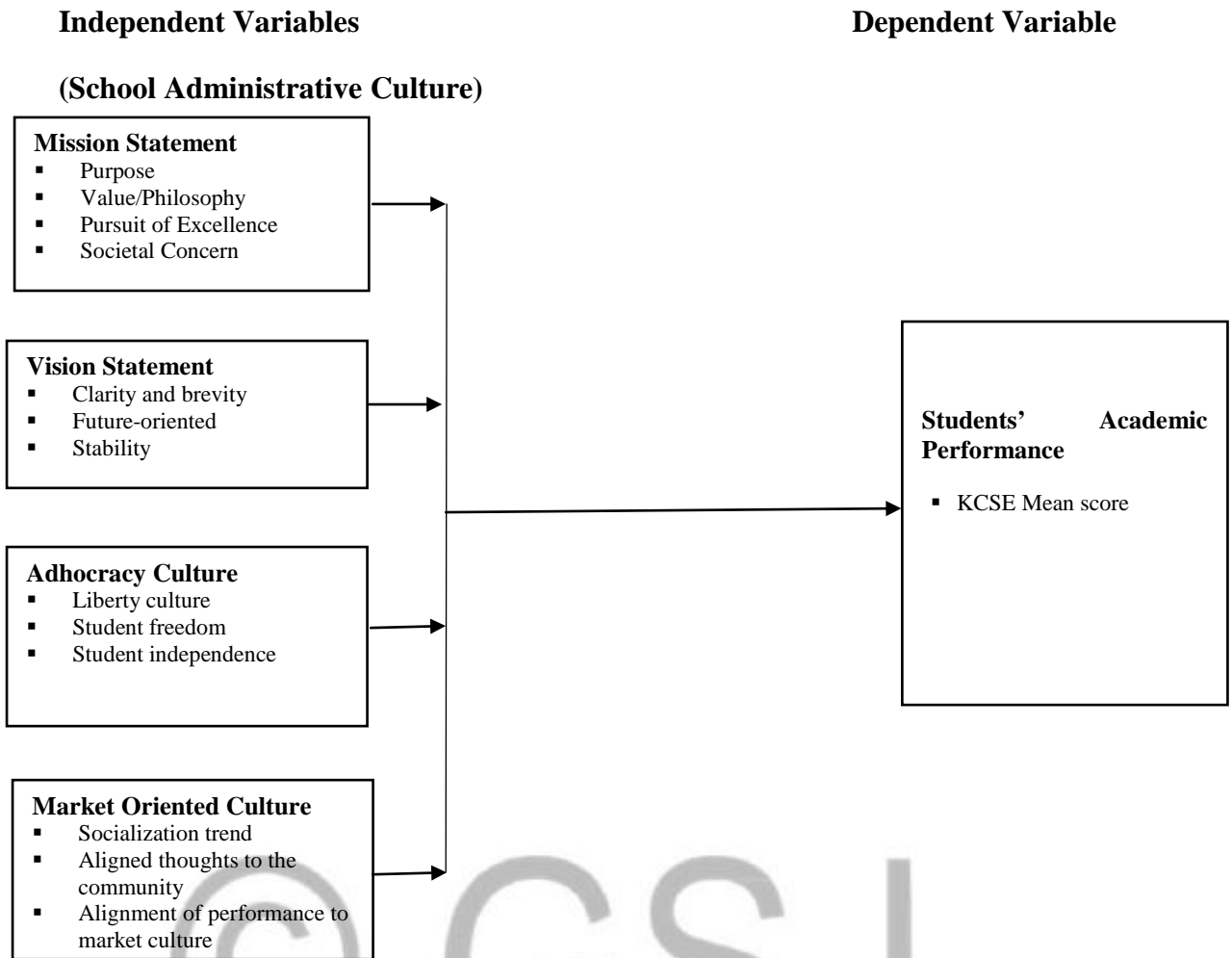
A study by Gambi (2014) probed the mediating effect of firm attributes on the nexus between organizational cultural affects and corporate performance. On the basis of cross-sectional dataset obtained from 252 Danish firms, structural equation model was employed as the primary empirical strategy. Organizational culture was represented by mission statement, vision statement and market oriented culture; firm attributes was captured by core values, orientation and leadership while operational performance was captured by new markets, growth and development. The results affirmed a positive significant impact of organization culture on performance while

firm attributes mediated the hypothesized relationship. However, this study was carried out in a developed market setting hence the outcome of the current study may not apply owing to regulatory, cultural and political environments.

While secondary schools stresses on steady, probable and systematic processes, the contemporary vibrant environment requires that the institutions to adjust to changes if they are to succeed. Some cultures are appropriate at adapting to variations and conserving the performance of an entity whereas others are not adaptive (Gregory, Harris, Armenakis, & Shook, 2019).

## **2.4 Conceptual Framework**

The conceptual framework illustrate how the study variables are conceptually linked. The independent variable is school administrative culture which is measured by mission statement, vision statement, adhocracy culture and market-oriented culture. The students' academic performance is the dependent variable and is measured by the KCSE results. The following is a diagrammatic depiction of the relationship between the study variables.



**Figure 2.1: Conceptual Framework**

### 3.1 Methodology

The main objective of this study was to probe the link association between the school administrative culture and students' academic performance. This study adopted cross-sectional descriptive survey design. This research design permits collection of data at one point in time thus representing a snapshot. Cross-sectional dataset drawn from a stratified sample of 114 public secondary schools was used for estimation purposes.

#### 3.1.1 Data Sources and Variable Description

The empirical investigation utilized primary data collected with an aid of semi-structured questionnaire devised on a five point Likert scale. Primary data was favored since it provides plenty evidence on the nexus between variables under investigation. The attributes employed to measure school administrative culture and



students' academic performance were adopted from prior empirical works which supplements construct validity. To operationalize school administrative culture, composite index was calculated by averaging 45 attributes segregated into four dimensions namely: mission statement, vision statement, adhocracy culture and market oriented culture. In contrast, KCSE results mean scores was utilized as a measure of student academic performance.

**Table 3.1: Operational Definition and Measurement of Variables**

Variable	Operational Definition	Scale	Measurement	Predicted Sign
SAC	This is a system of shared assumptions, values, and beliefs, which governs how people behave in organizations.	ordinal	Composite score	+
	This refers to students' academic achievement.			
SAC		ratio	Mean score	+

Where; SAC = school administrative culture; SAP = students' academic performance

### 3.1.2 Model Specification

To establish the link between the school administrative culture and students' academic performance, the parameters of the estimation model were analyzed using ordinary least squares (OLS) model. OLS was favored due to its pleasing and resilient statistical features as well as arithmetic simplification. This econometric technique is appropriate for cross-sectional investigations and proficiently exploit data where reliable results can be accomplished even while applying reduced sample size. To evaluate the proposed hypothesis, the following general linear model was employed as stated below;

$$SAP = \beta_0 + \beta_1 SAC + \epsilon \dots \dots \dots (3.1)$$

Where: SAP = students' academic performance;  $\beta_0$  = constant;  $\beta_1$  = coefficient; SAC = school administrative culture;  $\xi$  = error term.

#### 4.1 Reliability Test, Descriptive Statistics, Correlation Analysis and Diagnostic Tests

**Table 4.1: Reliability Test, Descriptive Statistics and Correlation Analysis**

Variable	$\alpha$	M	SD	SAC	SAP
SAC	0.79	3.84	0.72	1	
SAP	-	6.20	1.48	0.25*	1

Where; SAC = school administrative culture; SAP = students' academic performance

The reliability was measured using Cronbach's Alpha which evaluates the internal consistency of the items used to operationalize a specific variable. An alpha value ( $\alpha$ ) greater than 0.7 signifies reliability. Based on the estimation results, school administrative culture (SAC  $\alpha = 0.79$ ) had an Alpha value that exceeded the stated threshold consequently corroborating significant high reliability.

The average composite index for the school administrative culture was relatively high (M = 3.84, SD = 0.72) suggesting that the participants agreed that their schools had a unique administrative culture. Furthermore, the students' academic performance on average was modest (M = 6.20, SD = 1.48) signifying that there was minimal variation between schools in Makueni county in terms of academic performance. To assess the correlation between the school administrative culture and students' academic performance, Pearson correlation coefficient was employed. The results indicate that the school administrative culture significantly and positively correlated with corporate image ( $r = 0.84$ ,  $p < 0.05$ ) but was moderately and positively correlated with the students' academic performance ( $r = 0.25$ ,  $p < 0.05$ ). The cross-sectional dataset used to measure strategic agility was normally distributed as confirmed by

Shapiro Wilk test ( $p > 0.05$ ) whereas in contrast, the data used to represent sustainable competitive advantage was not normally distributed ( $p < 0.05$ ).

## 5.1 Study Findings and Discussion

To establish the link between the school administrative culture and students' academic performance, the null hypothesis specified below was tested.

*H<sub>01</sub>: The link the school administrative culture and students' academic performance of public schools in Makueni County is not statistically significant.*

**Table 5.1: School Administrative Culture and Students' Academic Performance**

SCA	$\beta$	SE	t	p	R <sup>2</sup>	Adj. R <sup>2</sup>	F
Constant	4.18	0.75	5.60	0.01	0.06	0.06	F (1, 109) = 7.53, p < 0.05
SA	0.53	0.19	2.74	0.01			

Where; SAC = school administrative culture; SAP = students' academic performance

Table 5.1 illustrates the outcome of the nexus between the school administrative culture and students' academic performance. The adjusted R<sup>2</sup> confirms that 2approximately 6% of disparity in the students' academic performance is described by the school administrative culture while the other 74% is explained by additional parameters overlooked in the estimation model. In overall, the regression model was statistically significant {F (1, 109) = 7.53, p < 0.05}. In addition, the results confirmed that the school administrative culture significantly and positively influenced the students' academic performance ( $\beta = 0.53$ ,  $t = 2.74$ ,  $p < 0.05$ ). This suggest that a unit upsurge in strategic agility contributed to 84% improvement in sustainable competitive advantage.

The findings of this empirical investigation are analogous with the prior studies

pertaining link between the school administrative culture and the students' academic performance. Similar outcomes are documented by Demol (2012) who suggested that the school administrative culture positively influenced on the performance of Slovenian companies. The empirical findings by Williams *et al.* (2014) which established a significant positive linkage between the school administrative culture and performance validate the upshots of this study. The outcome of this study also reflect those of Slate *et al.* (2010) who documented that of both poor and well performing schools were mainly oriented towards academic brilliance. The results of this study are similar with the outcome documented by Mallot (2013) who reckon that well performing and poor performing public schools vary in regard to their school administrative culture.

## **5.2 Conclusions, Limitations and Recommendations**

Even though the nexus between the school administrative culture and the students' academic performance has not been entirely or clearly explored, either theoretically or empirically in prior studies, the link has only been inferred in a bulk of empirical inquiries. Despite the conflicting outcomes, this study asserts that there is a positive significant relationship between the school administrative culture and the students' academic performance. The school administrative culture is a vital ingredient in the establishment of successful learning environment. It offers the most significant educational foundation for successful student achievement in terms of academic excellence. A school with a wholesome culture knows what it believes in and where it is going. Therefore creating schools with a culture of positive relationships have long been a characteristic of success.

Despite the noteworthy influence of the school administrative culture and the students' academic performance, the study nonetheless suffers number of intrinsic

shortcomings. To begin with, as a result of application of cross-sectional dataset in this empirical investigation, it is basically difficult to attribute causality to the postulated association which can fundamentally be attained through application of longitudinal data which assesses both temporal and spatial effects. Secondly, this study was performed in a transitioning market context therefore hindering the generalizability of study outcomes across manifold contexts due to incongruences in cultural, political, regulatory and economic environments. Finally, this empirical inquiry wholly focused on the public schools in Makueni County and the results cannot be confidently generalized to private schools due to institutional disparities.

Due to the underscored limitations, future studies should consider incorporating mediators and moderators into the bivariate study, which focusses on the school administrative culture and the students' academic performance so as to validate causality as instead of mere correlation. Future studies should also consider employing diverse metrics to proxy the study variables in so as to ascertain whether comparable outcomes can be attained. Furthermore, future empirical works should consider exploring the causal linkage in the context of private schools. Finally, future studies should consider employing longitudinal data which takes into account temporal and spatial characteristics and offers more credible results with respect to the variable relationships.

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