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## Relationship between selected student motivation cultures and student academic achievement in secondary schools in Nakuru County, Kenya

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### Abstract

This study investigated the relationship between selected student motivation cultures and academic achievement in secondary schools in Nakuru County, Kenya. The study adopted the descriptive survey design. The target population was comprised of all KCSE 2021 candidates and all principals of secondary schools in the County. The study used an outlier approach and the multistage sampling technique. The sample size consisted of 2214 students and 80 principals of schools. Data was collected using questionnaires and document analysis. Instruments were adapted for use after carrying out a test re-test procedure. Cronbach Alpha Coefficient of above 0.7 was obtained. Validity was ensured with the assistance of the supervisors. Data analysis was done using SPSS version 27 and was analysed using descriptive statistics (frequencies and percentages) and inferential statistics (Spearman rank correlations and Regression analysis). Quantitative results were presented in tables and qualitative results in prose. Private schools showed a stronger link between student motivation cultures and academic achievement than public schools. In high-achieving KCSE public and private secondary schools, the Spearman rank correlation analysis indicated a moderate positive correlation for public schools and a strong positive correlation for private schools between student motivation cultures and academic achievement. However, when assessing the relationship between student motivation cultures and student academic achievement in low-performing KCSE public and private secondary schools, the results differ. The study recommends that the school management should consider investing in student motivation cultures that enhance student academic achievement.

**Key words:** Academic achievement, cultures, school management, secondary schools, student motivation.



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**INTRODUCTION**

According to Teasley (2016), school culture refers to a set of common values, beliefs, attitudes and norms. In many ways, the culture is invisible. A school culture gives a school its identity. School culture entails shared attitudes and behaviours characteristic of a school. It is a natural way of doing things involving common activities and habits in a school. Moreover, Tony (2015) observed that organisational culture focuses on the values and beliefs of members, often enacted through shared norms and meanings. Culture is enduring and slow to change. It can only change under special circumstances, some of which may include the following: when a school faces an obvious crisis, such as a negative inspection report, or the leader succeeds a very poor principal, enabling staff to seek a new direction. Even in these new circumstances, culture change is not assured. School culture can be so strong to an extent that it informs the criteria for classification of schools. Schools in Shanghai, China, were categorised into high and low-performing schools based on student performance and evaluations, among other criteria, according to a report on school turnaround (Farmer & Jensen, 2013). The report further indicated that in Shanghai, high and low-performing schools were distinguished based on their school cultures and the quality of the learning environments.

Various studies in Africa have confirmed the problem of poor achievement in academics among secondary school students. Schulze (2015), for instance, in South Africa, found that student achievement in sciences in secondary schools was poor. In Tanzania, Chua and Mosha (2015) opined that recent apprehension on the poor performance of secondary schools had raised concerns over the

quality of education provided at the ordinary levels of education. The findings from this study indicated that the use of regular examinations and tests alone did not contribute to enhanced performance in schools.

Studies in Ethiopia indicated that school cultures such as absenteeism, cheating, and disengagement in tasks were prevalent in Ethiopian primary and secondary schools (Yalew et al., 2010). These studies show that there was a problem within schools that lacked positive cultures. Makewa et al. (2011) in their study compared the cultures of high and low provincial secondary schools in Nandi Central District, Kenya. The authors contended that school culture components can support or inhibit learning.

Many studies have been done in Kenya to confirm the problem of poor performance in Secondary Schools. For example, a study in Kenya Elgeyo Marakwet County confirmed poor academic performance (Jerotich, 2015). (Muasya et al., 2017) did another study on the relationship between head teachers’ instructional leadership practices and academic performance in Machakos County and confirmed that schools were dismally performing.

Poor academic performance is not only confined to Elgeyo Marakwet and Machakos Counties but also extends to Nakuru County, which has trailed in KCSE performance for some time, as summarised in Tables 1, 2, 3, and 4. In the overall analysis, the tables depict dismal academic achievement in the County as the main problem.

**Table 1: Mean Score of the 20 KCSE Poorly Performing Private Secondary Schools in Nakuru County 2015-2019**

	Average mean scores				
Year	2015	2016	2017	2018	2019
Score	2.55	1.92	1.80	1.849	1.982
Grade	D-	E	E	E	E

Ministry of Education Nakuru County (2021)

Table 1 presents the average mean score of the KCSE lowest performing 20 private secondary schools in Nakuru County from the year 2015 to 2019. As seen from the table, the schools dismally performed in KCSE, with an average score of 2.02, which is a D-

grade across the years, implying that the majority of students failed. Results for 2020 for these examinations were unavailable since the examinations were not done due to the COVID-19 pandemic that resulted in the school's closure.

**Table 2: Mean Score of the 20 KCSE Poorly Performing Public Secondary Schools in Nakuru County 2015-2019**

	Average Mean Scores				
Year	2015	2016	2017	2018	2019
Score	2.78	2.01	2.07	2.187	2.473
Grade	D-	D-	D-	D-	D-

*Note.* Source: Ministry of Education Nakuru County

Table 2 displays the average mean score of the lowest 20 KCSE poorly performing public secondary schools in Nakuru County from the years 2015 to 2019. It can be deduced from the results that the schools equally performed dismally with a mean grade of D-. Just like in

private schools, results for 2020 for these examinations were unavailable in public schools since the examinations were not done due to the COVID-19 pandemic, which led to the school's closure.

**Table 3: Mean Score of 20 KCSE High Performing Private Secondary Schools in Nakuru County 2015-2019**

	Average mean score				
Year	2015	2016	2017	2018	2019
Score	8.52	7.35	6.23	6.551	7.0227
Grade	B-	C+	C	C	C+

*Note.* Source: Ministry of Education Nakuru County (2021)

Table 3 presents the mean score of the top 20 high-performing private secondary schools in KCSE in Nakuru County from the year 2015 to 2019. From the results, the schools performed above average with a score of C and above. In the years 2015 to 2019, most

students attained minimum university entry requirements since the average mean score was 7.135 (C+). The same scenario can be seen in Table 4, which entails the performance of 20 high KCSE-performing public secondary schools.

**Table 4: Mean Score of 20 KCSE High Performing Public Secondary Schools in Nakuru County 2015-2019**

	Mean score				
Year	2015	2016	2017	2018	2019
Score	8.66	7.23	6.53	6.9112	7.118
Grade	B-	C+	C	C	C+

*Note.* Source: Ministry of Education Nakuru County (2021)

Table 4 presents KCSE results in the years 2015 to 2019. High-performing public secondary schools attained an average mean of 7.29 (C+). The minimum direct cut-off entry grade to Kenyan University is a C+, therefore implying that, on average, all students from these schools joined or had a potential of joining universities.

Education in Kenya is provided by the government and the private sector. Basic Education in Kenya is free and compulsory. Education in public schools is heavily subsidised by the government, thus making the provision of education in these institutions much cheaper. While this is the case, some people prefer schooling in private schools as opposed to public schools, yet both categories of schools offer the same

curriculum. Why, then, are private schools attractive to some people, yet they are relatively costly?

Academic achievement in both public and private secondary schools in Nakuru County national examinations has been consistently poor in some schools. Academic achievement has been relatively high in other schools over the same period. The nature of academic achievements in this County can be demonstrated by examining Table 1, which presents the mean score of 20 KCSE poorly performing private secondary schools in Nakuru County from 2015-2019. Table 1 shows that, on average, schools in this category scored a mean grade of D-. These results contrast with the 20 high-performing private secondary schools in the same period, as presented in Table 3. On average, performing private secondary schools obtained a score of C+ and above over the same period. Similar results were recorded in public schools, as shown in Table 4. The mean score index of the entire County significantly dwindled from the year 2015 to 2017. In 2015, it stood at 4.62, then dropped as follows: in 2016, it was 3.53; in 2017, it was 3.19; in 2018, it slightly rose to 4.040; and in 2019, it improved further to 4.385. Although this was the case, the overall mean for the entire County from 2015 to 2019 remained low at 3.953 (D), which was below average. With this poor academic performance at KCSE in Nakuru County, there is a cause for concern for all education stakeholders. The problem of poor academic performance in the County is likely to affect future economic development in the County. In view of this problem, this study investigated the influence of selected student motivation cultures on academic achievement in secondary schools.

### LITERATURE REVIEW

From documented literature, it is strongly evident that the definition of culture is difficult. Lebrón (2013), for example, asserted that in 1952, American anthropologists Kroeber and Kluckhohn reviewed concepts and definitions of culture and compiled a list of 164 different definitions. In addition, Gill (2013) presented selected definitions of culture and gave a concise definition of culture as a system of shared knowledge, attitudes, beliefs, procedures, and artefacts within a group of humans. Gill further argued that culture could exert a major influence on organisational performance since it influences behaviour. Lebrón

(2013), on the other hand, describes culture as a set of values and beliefs or a cluster of taught behaviours that we share with others in a specific society, giving us a sense of belonging and identity. It can be concluded that although many definitions of culture have been presented by different scholars over time, there is no agreement as to which is the right definition (Lebrón, 2013).

The concept of school culture is not new to academia (Rahiem et al., 2012; Peterson & Deal, 2009). A school is a complex system that continually evolves (Trombly, 2014). The concept of School culture is also complex, yet it plays a role in student academic achievement (Bektas et al., 2015). The concept is complex to the extent that so far, a few instruments have been developed and validated to examine it (Lee & Louis, 2019). It is important to note, however, that apart from school culture, many other variables and factors play a role in determining academic achievements in schools.

Any exemplary performance of a school is a result of its culture, which is built over time Peterson and Deal (2009). In the past, studies have linked school culture to academic achievements. In their study, Bektas et al. (2015) did a meta-analysis on the variable of school culture and academic achievement and found that school culture had a significant effect on student achievement. However, such achievement could be influenced by other variables. The quality of education provided by a school can be evaluated through student academic achievements and school effectiveness. School effectiveness is largely influenced by school culture (Duan et al., 2018).

The culture of a School is essential yet very difficult to define, resulting in many definitions (Prokopchuk, 2016). Different authors have attempted to define school culture differently (Rahiem et al., 2012). According to (Confeld, 2016), school culture can be described as shared values, beliefs, and traditions in a school. The author has also identified school culture characteristics as constituting the school's mission, vision and values; rituals, traditions, and ceremonies; history and stories; and artefacts, architecture, and symbols. These elements make culture very difficult to change but make it easy to transmit over time (Confeld, 2016). Receptoğlu (2013)

argued that basic beliefs, values, and assumptions constitute the most important elements of culture.

According to Peterson and Deal (2009), positive cultures are productive and encouraging. Positive school culture, for example, student mentoring programs, involvement of students in solving their problems, and cultivating cordial student-teacher and student-peer relationships, raises student achievements (Klevan & Villavicencio, 2016). Where School culture is positive, emphasis is placed on improving teaching and building relationships to improve student motivation and, ultimately, academic achievement (Prokopchuk, 2016).

In many parts of the world, differences exist between the academic achievement of secondary schools (Ndaji et al., 2016). Different schools operate in unequal environments besides having differences in their school cultures. Ndaji et al. (2016) did an in-depth comparison of the academic achievement of private and public schools in England and confirmed that private schools had higher average scores than public schools in all subjects, indicating that private schools conferred higher academic ability in students than public school. In this study, variations in academic achievements were not traced to differences in school cultures. This is a possible knowledge gap that the present study is keen to fill.

Better academic achievement is possible because private schools have more financial resources, have students whose socioeconomic status is higher, and are well-supervised compared with public schools, according to Iddi (2016). Other school culture aspects have been found to contribute to the achievement gap in secondary schools. In a report by the UNESCO Institute for Statistics (2013) in Jordan, Oman, and Egypt, a higher share of computers are allocated for pedagogy in public schools than in private schools. In addition, other positive teaching cultures have been found that cut across many countries that are found in private schools and therefore raising them to a higher notch of academic achievement.

Motivation is an important input to how a student carries out his or her studies and learning in general, which ultimately influences academic achievement. According to Rowell and Hong (2013), motivation is an important

foundation of academic development in students, yet it is a complex psychological phenomenon, and therefore, it becomes hard to define or find a single theory explaining it. Although the subject of motivation has been extensively covered in psychology, it has a niche in education. Motivation influences behaviour in each educational context. There are many ways through which teachers can motivate learners verbally or non-verbally (either intrinsic or extrinsic motivation).

In the USA, the design of academic assignments by teachers was found to enhance student motivation. For instance, student motivation culture in a school can be encouraged through teachers who reinforce the importance of academic assignments by establishing class-wide norms by positing clear and positively phrased classroom rules that serve as a visual reminder to students. Equally, such rules can be added to student assignment sheets (Xu, 2016). Student motivation culture in South Africa was linked to teaching methods employed by teachers in secondary schools and personal attention provided to students. Teachers create stimulating learning environments in classrooms by encouraging higher-order thinking and utilising inquiry-based teaching that includes projects and experiments (Schulze & Heerden, 2015).

Interestingly, Leuven et al. (2010) found that financial incentives had positive effects on the achievement of high-ability students, whereas they had a negative impact on the academic achievements of low-ability students. The study was a randomised field experiment that involved first-year economics and business students at the University of Amsterdam. One of the areas, which, from the literature review, seems to have had little attention is the influence of financial incentives on academic achievement in secondary schools within Nakuru County, Kenya. The current study sought to address this knowledge shortfall.

In brief, this literature review on student motivation culture has presented several key points worth noting. Firstly, student motivation is related to the following three aspects: personal attributes, educational setting, and moderator variables. Secondly, teachers have a role to play in motivating students to learn, and finally, financial incentives influence motivation and hence academic achievement. A shortfall of this review is that

the studies cited did not compare student motivation cultures of private schools and public schools to academic achievements. The present study compared student motivation cultures of private schools and public schools to academic achievements.

The study was informed by Walberg's (1984) Theory of Educational Productivity. According to this theory, student academic achievement can be influenced by nine variables, which are motivation, student's ability, quality of instruction, the quantity of instruction, peer group, classroom climate, age and stage of development, exposure to social media, and home environment. The study was also informed by the organisational culture theory by Quinn and Rohrbaugh (1983). The theory presents a spatial model, which provides a framework upon which organisation analysis and evaluation can be done. Three value dimensions, which are control-flexibility, internal-external, and means-ends, underlie the conceptualisation of organisational effectiveness. The theory argues that the main theme in organisation theory is effectiveness. The theory further provides means through which organisational analysis can be done by using four models to develop the construct of effectiveness. The Theory of Organisational culture is relevant to educational organisations and applies to this study. The theory has been used in educational research by Berkemeyer et al. (2016). Regarding the theory and applying the means and ends dimension, selected cultures of student motivation cultures were examined to find out how they influenced productivity, which in this case was academic achievement. The rational goal model was also applicable.

## **METHODOLOGY**

### **Research Design**

This study used the descriptive survey design. The design helped yield useful information about the phenomena under study. The study investigated the influence of selected motivation cultures on student academic achievements in secondary schools in Nakuru County

### **Research Method**

The study used mixed methods. It is important to note that the method selected was appropriate to the task because it had more strengths than weaknesses. Mixed

methods research was preferable in this current study because it offered an opportunity for the researcher to understand better the problem of the study since it enabled capturing information that might be missed if one research design were used.

### **Philosophical Paradigm**

The study adopted constructivism and positivism research paradigms. A researcher employing this paradigm collects qualitative data using interviews, document review, and observation (Adom et al., 2016).

### **Population of Study**

The target population comprised all the 365 public and 146 private secondary schools in Nakuru County. The targeted participants for the study were the principals from the 365 public and 146 private Secondary Schools in Nakuru County. A total of 33,826 form four students enrolled in both public and private secondary schools formed the student target population for this study.

### **Sampling Procedure**

The study employed a multistage sampling technique. Each stage can be conducted using any sampling technique (Statistics Canada, 2010). For a school to be included in this study, it must have presented and obtained results for candidates in KCSE for five continuous years covering the period 2015 to 2019. Krejcie and Morgan's (1970) table was used to determine the sample size of Students within each of the identified school categories. Simple random sampling using random tables was used to obtain the actual students' proportions for the study.

### **Sample Size**

Using KCSE results rankings between 2015 and 2019 for public and private secondary schools in Nakuru County, the researcher computed each school's average KCSE mean score for the period 2015 to 2019 for private and public schools separately. The schools were then ranked in terms of performance based on the mean scores computed from the highest to the lowest performer. From the 5-year KCSE average mean scores, the researcher purposively isolated, based on ranking, 20 high-performing schools and 20 low-performing private and public schools. Categorising schools into high and low extreme ends formed the basis of the outlier approach. The study used an outlier approach to

determine the accessible population, as shown in Table 5. The outlier approach was used by Ngala and Odebero (2010) and Mudulia (2012). Aguinis et al. (2013) defined outliers as data points that deviate markedly from others and are found at the tails of data distributions. Based on this approach, the research sought to study two broad extreme categories of students and principals from schools (outliers), which were

bifurcated on the basis of academic performance into the 20 high performers from public and private schools and 20 low-performing public and private secondary schools. The accessible population comprised a total of 7376 form four students drawn from both public and private secondary schools.

**Table 5: Accessible Population**

School category	Total number of schools	The accessible population of students
Top-performing KCSE Public secondary schools	20	3,580
Top-performing KCSE private secondary schools	20	1882
Low-performing KCSE public secondary schools	20	962
Low-performing KCSE private secondary schools	20	952
<b>Total</b>	<b>80</b>	<b>7376</b>

*Note.* Source: Ministry of Education Nakuru County (2021)

Determination of sample size was a critical stage in this study because the sample obtained reflected characteristics of the population and hence legitimised generalisation. Leighton (2013), for instance, observed that scholarly and scientific investigations are conducted normally with an interest in generalising findings to a larger population so that the findings can benefit more people. However, other pertinent considerations like time available, accessibility of the sampled components, and cost of the study were considered before arriving at an appropriate sample size.

To obtain the correct sample size, the study used 30 per cent of the accessible population cases in private schools and 30 per cent of the accessible population cases in public schools. According to Mugenda and Mugenda (1999), at least 30 per cent of the population cases are

sufficient for research. From Table 5, the accessible population totals 7376 cases, and 30 per cent of these cases totals 2214. To obtain the appropriate sample size, these cases (2214) were distributed as follows for each stratum of school: top-performing public secondary schools = 1074 calculated as  $(30/100 \times 3580)$  cases, top-performing private secondary schools = 565 calculated as  $(30/100 \times 1882)$  cases, low performing public secondary school = 289 calculated as  $(30/100 \times 962)$  cases, and low performing private secondary schools = 286 calculated as  $(30/100 \times 952)$  cases, totalling to 2214 cases. Based on these cases and by using Krejcie and Morgan's (1970) table for determining the study sample size, the sample sizes of students studied for each stratum of schools were determined, as shown in Table 6.

**Table 6: Participating Schools by School Performance Category**

Category	Target	Actual	Percentage Achieved
Top-performing KCSE Public secondary schools	20	18	90.0%
Top-performing KCSE private secondary schools	20	20	100.0%
Low-performing KCSE public secondary schools	20	20	100.0%
Low-performing KCSE private secondary schools	20	16	80.0%
Total / Average achieved	80	74	92.5%

Purposive sampling was done to obtain the sample size of principals designated for the study. In this respect, 20 principals each from the best high-performing and lowest low-performing public and private secondary schools in Nakuru County were selected to form a sample size of 80 principals. The outlier approach informed the selection of principals and students. With this approach, 20 principals each were purposely sampled from best-performing public and private secondary schools, respectively. In addition, 20 principals each were purposely sampled from low-performing public and private secondary schools, respectively. From each of these two extreme strata, the study obtained 40 principals each and subsequently brought the total sample to 80 principals.

**Instrumentation**

The study used questionnaires and document analysis to obtain data. Document analysis is a systematic procedure for evaluating or reviewing documents both printed and electronic for purposes of data interpretation to gain meaning and understanding for the development of empirical knowledge (Bowen, 2009). The researcher analysed school report documents on student motivation to gain insights into possible trends. The documents, which were analysed, included registers, event programs, and invitation letters among others. Prior to use, the research instruments were subjected to validity checks and reliability tests. The reliability was tested using Cronbach Alpha after yielding a result of above 0.7; it was accepted for use. A pilot study was undertaken in Nakuru County with schools which did not participate in the final study.

**Data Collection Procedure**

The researcher sought consent from the Institute of Post Graduate Studies of Kabarak University, with which a research permit from the National Commission for Science, Technology, and Innovation (NACOSTI) was

obtained. Authorisation letters were obtained from Nakuru County Ministry of Education offices.

**Data Analysis and Presentation**

The study collected both quantitative and qualitative data. Quantitative data were analysed using the Statistical Package for the Social Sciences (SPSS) version 27. Descriptive statistics, which included means, percentages, frequencies, and median, were computed. For inferential statistics, the study used Spearman rank correlations and regression analyses. The outcomes of the quantitative data analysis were presented in tables and figures. Qualitative data collected from interviews was analysed using Thematic Textual Analysis. The qualitative analysis results were presented in the form of narrations.

**RESULTS AND DISCUSSION**

**Respondent's Response Rate**

The study was able to obtain a response from 1707 students and 67 principals, translating into a response rate of 77.33 per cent; this was adequate for the researcher to draw reliable results and make recommendations. The recommended response rate for on-paper surveys is 75 per cent (Nulty, 2008). Consequently, therefore, the attained response rate was sufficient for this research.

**Participating Schools by School Performance Category**

Top performing KCSE public secondary schools were represented by ninety percent, top performing KCSE private secondary schools were represented by one hundred per cent, low performing KCSE public secondary schools were represented by 100 per cent and low performing KCSE private secondary schools were represented by eighty percent. The percentages achieved for each category were above the recommended



percentage for on-paper surveys at 75 per cent (Nulty, 2008).

**Gender of the Respondents**

The results show that among the student respondents, 53.3 per cent were male and 46.7 per cent were female. In addition, 52.7 per cent of the principals were male, while 47.3 per cent of them were female. The results suggest that in the schools visited, there were more male participants. Nevertheless, the researcher was able to capture the responses from all the respondents, thus eliminating the possibility of bias based on gender.

**Relationship between Selected Student Motivation Cultures and Student Academic Achievement  
Student Motivation through Presents to High Achievers**

The findings presented in Table 7 indicate that all the principals of public schools and all principals of private secondary schools agreed that they gave presents to high academic achievers at the end of the term.

**Table 7: Student Motivation through Presents to High Achievers**

		School Category			
		Public		Private	
		F	%	F	%
<b>The principal(s) gives presents to high academic achievers at the end of the term.</b>	Strongly disagree	0	0.00 %	0	0.00 %
	Agree	1 0	26.30 %	1 2	33.30 %
	Strongly agree	2 8	73.70 %	1 6	44.40 %

The principals indicated that Stationery (Pens, exercise books, Notebooks, geometrical sets) was the most common type of present given to high academic achievers, as shown by responses from 55 schools; this was followed by Revision textbooks in 41 schools, and Calculators in 31 schools.

**Student Motivation through Presents to Most Academically Improved Student(s)**

From the results it emerged that 94.6 per cent of the principals of public schools and 77.8 per cent of principals from private secondary schools agreed that they gave presents to the most academically improved student(s) at the end of the programmed examinations. The principals were asked to indicate which type of presents they gave to the most academically improved student(s) in their school at the end of the term when releasing examination results, and the responses were as follows.

- ID 14 – “Stationery and sometimes snacks at a class level.”
- ID 2 – “Books, bread soda, pens, ruler”
- ID 15 = “Revision materials and stationery”.

The results showed that the schools gave a variety of presents to the most academically improved student(s) in their school, as a way of motivating them to work harder academically.

**Preparation of Special Meals to Motivate a Well Academically Performing Class**

The findings reveal that 61.8 per cent of the principals of public schools and 63.9 per cent of those from private secondary schools agreed that special meals were prepared to motivate a well-academically performing class(s). In the majority of the schools in both categories, the preparation of special meals was employed to motivate a well-academically performing class. The results also show that 34.2 per cent of the principals of public schools and 36.1 per cent of those from private secondary schools disagreed with the statement, implying that it is not all the time that special meals are prepared to motivate a well-academically performing class.

## **Motivation through Academic Trips for top performing Class**

The results show that 55.9 per cent of the principals of public schools and 64.5 per cent of those from private secondary schools agreed that their schools took the top performing class (per term) for an academic trip as a way of motivation. This implied that a majority of public and private schools took the top performing class (per term) for an academic trip as a way of motivation. This notwithstanding, a smaller portion (44.1%) of the principals of public schools and 35.5 per cent of those from private secondary schools disagreed with the statement.

The principals were asked whether there was a relationship between academic trips prepared for a top-performing class(s) and academic achievement in KCSE in their school, and the main responses were.

*ID 24 – "These trips boost their performance."*

*ID 27 – "We do not organise such trips."*

*ID 56 – "Yes, top-performing students pass well in KCSE because of the motivation they are used to."*

The results indicated that according to most of the principals, there was a relationship between academic trips prepared for a top-performing class(s) and academic achievement in KCSE in their schools.

## **Public Acclaim given to High Academic Achievers**

The school principals were asked to indicate whether they agreed with the statement that public acclaim was given to high academic achievers, and the results were provided in Table 8. The results indicated that 94.6 per cent of the principals of public schools and 63.9 per cent of those from private secondary schools agreed that public acclaim was given to high academic achievers as a way of motivation.

The principals were asked to indicate how giving public acclaim to high academic achievers related to academic achievement in KCSE in their school, and they indicated that it motivated the learners to work better.

PID 7 is quoted stating that *"It Is a way of motivating them thus better performance,"*

PID 66 – *"It improves the ego of those involved to even better their performance."*

## **Use of Career Guidance for Encouraging Learners**

The findings indicate that 92.1 per cent of the principals of public schools and 77.8 per cent of those from private secondary schools agreed that career guidance is given to students to encourage them to study towards given careers. The implication is that in many public and private schools, career guidance was given to students. The principals were asked to explain how career guidance related to academic achievement in KCSE in their schools, to which some provided the following responses.

PID 3 – *"Learners can identify areas of career interest and work towards achieving them."*

PID 12 – *"It re-aligns students to their subject of interest and focus their energy."*

The results are in agreement with those in a study by Mporananayo and Andala (2018), who established that there was a significant relationship between career guidance services and students' academic performance. The researchers found that in addition to helping students form effective study habits, they also need to help them get ready for tests and build up their self-confidence.

## **Presents from School Alumni for High Achievers**

The findings show that 25 per cent of the principals of public schools and 19.5 per cent of those from private secondary schools agreed that high achievers received presents from their school alumni. This shows that in a minority of the schools in both categories of schools, high achievers received presents from the school alumni.

When asked to list the types of presents received from their school alumni, which were meant to motivate students to perform better in KCSE, all the principals indicated that there were no such occurrences. One principal is quoted stating. *"Since I joined this school, no student has ever received a present from the school alumni."* Many of the principals simply stated, *"None."*

## **Correlation between Student Motivation Culture and Student Academic Achievement**

The results for the relationship between student motivation culture and academic achievement were computed as shown in Table 8. In high-performing

KCSE public and private secondary schools, the Spearman rank correlation analysis demonstrates a moderate positive correlation in public schools ( $r = 0.498$ ,  $p = 0.036$ ) and a strong positive correlation in private schools ( $r = 0.921$ ,  $p = 0.000$ ) between student motivation culture and academic achievement. These results underscore the crucial role of student motivation culture in academic success, with a more significant

impact in private schools due to greater resources, personalised attention, and increased parental involvement. These findings align with prior research (Mwiria, 2009; Serem, 2015), emphasising the strong link between student motivation and academic success, highlighting the need to foster motivation culture in educational settings for improved performance.

**Table 8: Student Motivation Culture and Student Academic Achievement for Top Performing Secondary Schools**

Performance Category		Student Academic Achievement	
Top-performing KCSE Public secondary schools	Student Motivation Culture	Correlation Coefficient	.498*
		Sig. (2-tailed)	0.036
		N	18
	Student Academic Achievement	Correlation Coefficient	1
		Sig. (2-tailed)	.
		N	18
Top-performing KCSE private secondary schools	Student Motivation Culture	Correlation Coefficient	.921**
		Sig. (2-tailed)	0.000
		N	20
	Student Academic Achievement	Correlation Coefficient	1
		Sig. (2-tailed)	.
		N	20

The Spearman rank correlation coefficients examined the relationship between Student Motivation Culture and Student academic achievement in low-performing KCSE public and private secondary schools, and the results are presented in Table 9. The findings showed a statistically insignificant correlation ( $r = 0.147$ ) in public schools, while private schools displayed a significant correlation ( $r = 0.397$ ), consistent with previous Kenyan research underscoring the positive link between student

motivation and academic achievement. The varying correlation coefficients are attributed to resource disparities, with private schools having better-equipped facilities and more motivated teachers, fostering a conducive learning environment. In contrast, resource limitations in public schools may impede student motivation and academic success, emphasising the need for enhanced resource allocation to improve the learning environment.

**Table 9: Association between Student Motivation Culture and Student Academic Achievement for Low-Performing Secondary Schools**

Performance Category			Student Academic Achievement
Low-performing KCSE public secondary schools	Student Motivation Culture	Correlation Coefficient	0.147
		Sig. (2-tailed)	0.535
		N	20

	Student Academic Achievement	Correlation Coefficient	1
		Sig. (2-tailed)	.
		N	20
Low-performing KCSE private secondary schools	Student Motivation Culture	Correlation Coefficient	0.397
		Sig. (2-tailed)	0.127
		N	16
	Student Academic Achievement	Correlation Coefficient	1
		Sig. (2-tailed)	.
		N	16

Table 10 presents results for the association between student motivation culture and student academic achievement by type of secondary school. The table reveals a moderate positive correlation between student motivation culture and student academic achievement in Nakuru County's public and private secondary schools. The correlation is stronger in private schools ( $r = 0.409$ ) than in public schools ( $r = 0.372$ ), and both are statistically significant ( $p < 0.05$ ). This finding supports

previous Kenyan research, like Simatwa and Namusonge's 2018 study, which emphasises the link between student motivation and academic achievement. Smaller class sizes, improved teacher-student ratios, and more resources in private schools may contribute to the stronger correlation observed. This highlights the importance of prioritising student motivation culture for enhanced academic achievement in both public and private schools.

**Table 10: Association between Student Motivation Culture and Student Academic Achievement by Type of Secondary School**

School Category		Student Academic Achievement	
<b>Public</b>	Student Motivation Culture	Correlation Coefficient	.372*
		Sig. (2-tailed)	0.022
		N	38
	Student Academic Achievement	Correlation Coefficient	1
		Sig. (2-tailed)	.
		N	38
<b>Private</b>	Student Motivation Culture	Correlation Coefficient	.409*
		Sig. (2-tailed)	0.013
		N	36
	Student Academic Achievement	Correlation Coefficient	1
		Sig. (2-tailed)	.
		N	36

**Performance Trends**

Using data collected via document analysis, quantitative computations were made, and the responses showed the average percentage distribution of performance grades in KCSE in the period between 2015 and 2019, as

presented in Table 11. The results show that the trend in performance is uniform and appears to be worsening in 2019. The performance is indicative of some cultures that need to be explored.

**Table 11: Performance Trends**

	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	Z
	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>Yr. 2015</b>	7.1	10.7	10.1	10.0	10.8	13.2	8.4	6.1	4.2	6.4	10.1	2.9	0.0
<b>Yr. 2016</b>	0.1	4.1	8.7	7.8	11.2	12.1	11.2	10.8	13.5	6.3	9.7	4.4	0.2
<b>Yr. 2017</b>	0.0	2.2	5.2	5.9	11.0	13.3	15.1	14.7	10.0	8.5	11.0	3.0	0.1
<b>Yr. 2018</b>	0.1	2.2	6.8	8.3	9.8	12.8	13.0	11.7	9.6	7.9	11.6	6.2	0.0
<b>Yr. 2019</b>	0.1	2.5	7.1	7.9	10.4	13.6	13.7	14.7	8.8	8.2	7.8	5.3	0.0

**CONCLUSIONS AND RECOMMENDATIONS**

**Conclusions:** The study sought to find out the relationship between selected student motivation cultures and student academic achievement in secondary schools in Nakuru County, Kenya. The study concludes that student motivation cultures contributed significantly toward learners’ academic achievement. Comparatively, student motivation culture were more influential in academic achievement in private schools than in public secondary schools. The study further concludes that in some schools, student motivation cultures were not embraced, and this affected student academic achievement. For instance, in some schools, public acclaim was not given to high academic achievers, and

career guidance was not given to students to encourage them to study towards given careers.

**Recommendations:** The school management needs to consider encouraging teachers to employ student motivation cultures for student academic achievement. The principals should consider giving students presents to the most academically improved student(s) at the end of programmed examinations, as well as give public acclaim to high academic achievers. The principals need to consider ensuring that career guidance is given to students to encourage them to study towards given careers.

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