

## Relationship between Increased Student Enrolment and Delivery of Accommodation Services in Public Boarding Secondary Schools in Kisumu West Sub-County, Kenya

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### ABSTRACT

The issue of students' enrolment and student welfare has been the concern of education researchers around the globe. This study attempted to establish the relationship between increased student enrolment and delivery of student accommodation services in public boarding secondary schools in Kisumu West Sub-County, Kenya. The objective of the study is to determine the relationship between increased student enrolment and delivery of accommodation services in public boarding schools. The study hypothesis states that there is no statistically significant relationship between increased student enrolment and delivery of accommodation services in public boarding secondary schools in Kisumu west sub-county, Kenya. The target population consisted of 8 public boarding secondary schools and 5945 students of form two, three and four, 8 boarding mistresses/masters and matrons/patrons. The study adopted a descriptive survey design which consisted of 357 students, 8 boarding mistresses/masters and 8 matrons/patrons, making a total of 429 sample size. The final sample size of 357 students was arrived at by using the Krejcie & Morgan table. A combination of census and proportionate sampling techniques was employed. Data for the study was collected through open ended and closed ended questionnaires. Pilot study was carried out in two schools outside the county. The instrument was evaluated for content validity while the reliability was established using the test-retest method that yield a coefficient value of 0.7 which was considered reliable. Qualitative data was analyzed based on the content of the responses while quantitative data was coded and entered in to SPSS and analyzed using inferential statistics. A calculated correlation coefficient of 0.72 was obtained from closed ended questionnaire and 0.81 from open ended questionnaires hence considered reliable. The results indicate that the relationship between student enrolment and delivery of accommodation services was negative and statistically significant at a .05 confidence level,  $r(294) = -.255$ ,  $p = .000$ . The study recommended school administrators find ways to increase the accommodation services in the schools to reduces incidences of overcrowding in the dormitories, poor quality of food, inadequate bathrooms and toilets, inadequate guidance and counselling personnel among others.

**Keywords:** Accommodation services, Student Enrolment, Kisumu West Sub-County, Kenya, and Public Boarding Secondary Schools.

## I. INTRODUCTION

Globally, Indonesia triumphed in reaching high levels of enrolment and school attendance. Over the past twenty years, Indonesia made drastic progress by increasing its citizens' access to education (Beatty et al., 2018). Indonesians saw a notably increased enrollment in Grades 7 to 9 and Grades 10 to 12 between 2000 and 2014. By around the year 2014, higher than 93% of students had completed their level of schooling. Nevertheless, those gains in enrolment and attainment have not been accompanied by meaningful improvements in student learning. Throughout Ghana's history, governments implemented policies such as partial funding and the progressively free upper secondary school education policy in 2015. In 2017, the free education policy of total financing was applied in Ghana (Ministry of Education & Republic of Ghana, 2017).

The Ugandan government 2007 introduced Universal Secondary Education to double the number of those joining the secondary level (Mamba, 2020). In Uganda, free secondary education increased enrollment, decreased costs, and improved access to secondary education for most families. From the Ministry of Education and Sports (2017), enrolment in secondary schools increased by 13.5% between 2015 to 2016 and 2016 to 2017, from 1.3 to 1.5 million students. Implementing free secondary education in Uganda had several drawbacks, such as limited resources and classrooms with small carrying capacities, dormitories, laboratories, sanitation facilities, and other teaching and learning materials (Mwangota, 2019).

The Kenyan government has implemented programs and policies resulting in a rapid expansion of the education sector and increased enrolment at the secondary level (MOEST, 2016). Primary education became free in 2003, and secondary education began to be subsidized in 2008. As a result, a 70% transition rate was recorded in 2008, and 80% was recorded in 2012 (Wanja, 2014). The transition shifted from 76.8% in 2013 to 84% in 2017 because of the introduction of Free Secondary Education (Mwikya et al., 2019). The current policy is the hundred percent transition policy 2019, which states that all students who completed the primary level should join the secondary level. A report by EMIS (2019) registered a massive rise in secondary enrolment in almost all the public schools in Kenya. There were 2.8 million secondary school pupils in Kenya in 2019, up from 2.6 million in 2016. Njenga (2019) investigated the determinants of implementing a 100 percent transition policy; it focused only on sanitation facilities, learning spaces, and sports facilities in secondary schools in Nyandarua County. The study findings show that most schools needed more learning and teaching spaces, sports, and sanitation facilities. In addition, there was overcrowding of students in the classrooms, laboratories, and libraries due to the government's 100% transition policy.

As shown in Table 1, student enrolment significantly increased from 2019 to 2022, and many schools needed to prepare for the surge. The total number of students enrolled in 2019 was 4019 while those enrolled in 2022 were 7081. Despite the rapid increase in student enrollment in public boarding secondary schools in Kisumu West Sub- County, Kenya, there is a growing concern about the delivery of accommodation services. The substantial rise in enrollment has resulted in issues such as overcrowded dormitories and inadequate sanitation facilities, which negatively impact the well-being of students (Njenga, 2019). The research gap in this context highlights the need to investigate the relationship between increased student enrollment and the delivery of accommodation services in public boarding secondary schools in Kisumu West Sub-county. It is crucial to understand how the rising enrollment affects the delivery of

accommodation services provided to students and identify potential areas for improvement to ensure a favorable learning environment. This study addressed the problem of increased student enrolment in secondary schools in Kisumu West Sub- County, Kenya.

Table 1 shows the percentage increase in enrolment between 2019 and 2022. It shows that enrolment increased.

**Table 1:**

*Total number of Students (2019-2022)*

NO.	SCHOOL	2019	2020	2021	2022	%increase
	SCHOOL O	1550	1832	2003	2170	40%
	SCHOOL P	480	595	761	927	93%
	SCHOOL Q	512	608	710	812	70%
	SCHOOL R	501	581	653	725	45%
	SCHOOL S	238	382	526	670	181%
	SCHOOL T	250	355	461	566	126%
	SCHOOL U	293	364	432	498	70%
	SCHOOL V	195	291	387	485	148%
	<b>TOTAL</b>	<b>4019</b>	<b>5009</b>	<b>5933</b>	<b>6853</b>	<b>76%</b>

**Source:** Kisumu West Sub- County Education office, 2022

As shown in Table 1, student enrolment significantly increased from 2019 to 2022, and many schools were unprepared for the surge. Table 1 shows the average increase in enrolment in public boarding secondary schools in Kisumu West sub-county, Kenya. School O 62%, School P 78%, Q 57%, R 43%, S 161%, T 127%, U 79%, V 150%. This problem affects all the public boarding schools in Kisumu West Sub- County.

## II. METHODOLOGY

The researcher used a descriptive survey design to collect data by administering questionnaires to a selected sample of people. The research was carried out in the Kisumu West sub-county. The target population consisted of 8 public boarding secondary schools and 5945 students of form two, three, and four, eight boarding mistresses/masters, and eight matrons/patrons (County Director of Education Office, 2021). Students in class one were excluded from the study because they had not stayed long in school to be able to give accurate information. In contrast, those in form two, three, and four were included due to their long stay in school, providing them with more extensive experience and the ability to offer more accurate information. The students of forms 2, 3, and 4 were asked to pick plain pieces of paper marked with "yes" or "no" to express their willingness to participate. Those who chose "yes" were included in the study.

A purposive sampling technique was employed in choosing the type of schools to be involved in the study. In this case, the researchers employed a purposive sampling technique to select public boarding secondary schools for the study. By selecting public boarding secondary schools through purposive sampling, they can leverage their knowledge to identify schools most relevant to their research objectives. The census method was used in choosing all eight boarding secondary schools. The sample size of the students was determined using the Krejcie and Morgan table (1970), and proportionate sampling was used to get the sample size for each school. Simple random sampling was applied to choose the actual students to participate in each school. The study sample size comprised eight matrons/patrons, eight boarding mistresses/masters, and a total of 357 students. The researcher used close-ended and open-ended questionnaires, and the instruments were evaluated for content validity. The eight matrons/patrons and eight boarding masters/mistresses were given open-ended questionnaires, while only the students were issued closed-ended questionnaires. Data analysis was done for qualitative and quantitative data. A summary of qualitative analyses was presented in narrative form, while quantitative analyses in descriptive statistics involved using mean (measures of central tendency), percentages, and frequencies. Since the researcher collected data from minors, the permission obtained from the respective school principals was sufficient for the minors to participate in the study. Informed consent and voluntary involvement were requested. All respondents were asked to remain anonymous. The information from the respondents was treated as confidential and private.

### III. RESULT

Quantitative data on the delivery of accommodation services were provided by the students. It was gathered using a set of 10 closed-ended items. The items were based on the extent to which the respondents agreed with them (SD=4, D=3, A=2, SA=1). The descriptive statistics of accommodation services was calculated from the students' response. Table 18 shows findings in percentage.

**Table 2:**  
*Students' Responses to Items on of Accommodation Services*

Item	N	SA (%)	A (%)	D (%)	SD (%)
Due to increased enrolment, there is crowding in the dormitory	294	41.3	24.6	22.2	11.9
Due to increased enrolment, there are fewer bed spaces in the dormitory	294	33.4	25.9	21.2	19.5
Due to increased enrolment, some students share beds	294	3.8	4.4	21.2	70.6
Due to increased enrolment, there are increased incidences of stealing in the dormitories	294	30.8	36.0	20.5	12.7
Due to increased enrolment, dormitories are often untidy.	294	34.6	36.7	9.2	19.5
Due to increased enrolment, there are increased cases of respiratory infections among students in the dormitories.	294	15.8	21.1	26.6	36.5
Due to increased enrolment, there is usually a lot of noise the dorm	294	32.8	32.4	20.6	14.2

The bathrooms in the dormitories are not enough for us	294	48.1	21.8	16.3	13.8
The toilets in the dormitories are not enough for us	294	46.6	23.6	12.7	17.1
Due to increased enrolment, there is inadequate supply of water in the dormitories.	294	40.0	23.6	16.1	20.3
Increased enrolment denies students privacy in the dormitories	294	25.3	19.8	29.2	25.7

Based on Table 18, most respondents agreed and strongly agreed that increasing enrolment leads to crowding in the dormitory (65.9%), while very few (34.1%) disagreed and strongly disagreed. The number of students enrolled in a boarding school directly impacts the availability of accommodation services. As more students enroll, the demand for accommodation services increases, which can result in overcrowding in the dormitories. This concurs with Ngala (2018) that increased student enrollment resulted in a dormitory facility shortage, leading to overcrowding and poor student living conditions. The study's author recommends that institutions invest in upgrading and expanding their accommodation facilities to accommodate the growing student population.

Additionally, many respondents agree with the availability of fewer bed spaces (59.3%). The fewer bed spaces result from too many beds in a small space. Most students agree that fewer bed spaces exist in the sleeping areas, resulting in cramped and uncomfortable living conditions. The findings resonate with Olagunju and Zubairu (2016) that students who lived in more crowded dormitories needed more space since the dormitories were packed to capacity. The authors suggest that crowding and inadequate bed spacing may increase the risk of transmission of respiratory infections in boarding schools. Jennifer (2011) also observed that students struggle over bed spaces and room accessories when schools have over-enrolment.

From the findings (8.2%) of the respondents agreed that they share beds. Sharing beds among boarders can cause discomfort and a lack of privacy among students, negatively affecting their academic performance and overall well-being. It is also worth noting that sharing a bed can compromise the quality of sleep for both students, leading to potential health risks, mainly if one student is ill. This resonates with a study by Laryea and Ibem (2017) in Ghana found that sharing beds was common in colleges, with up to 4 students sharing a single bed. The study found that sharing beds was associated with poor sleep quality and increased risk of infectious diseases.

The alarming increase in theft in the dorms was acknowledged by a significant percentage of respondents (66.8%) who agreed with this observation. Overcrowded dormitories can increase the risk of theft and other security-related issues, mainly if inadequate supervision or security measures are in place. The findings highlight the need for institutions to ensure that their accommodation facilities can accommodate the growing number of students without compromising their safety and security. Therefore, institutions must invest in security cameras, alarms, and personnel to prevent theft and other security-related issues in overcrowded dormitories. Similar studies have been carried out, which concur with the findings above. For instance, a study by Martinez et al. (2021) on the safety and security of student accommodation found that overcrowded dormitories were more likely to experience theft and other security-related issues. The study recommended that institutions must invest in measures such as security cameras, locks, and security personnel to prevent such incidents.



This finding is also consistent with Khajehzadeh and Vale (2016), who found that theft is more prevalent in crowded dormitories in Norwegian boarding schools. However, (71.3%) of respondents in the study agreed that the dormitories are frequently untidy, which is consistent with the challenges faced by migrant children in China. The study by Liang et al. (2017) provides insights into the challenges of accommodating a growing population, particularly those from disadvantaged backgrounds. Therefore, institutions must prioritize investing in upgrading their accommodation facilities to promote students' well-being and academic success. Previous studies corroborate the anecdotal evidence that some students share beds due to a housing shortage. Many students had to share beds or put mattresses on the floor due to excessive dorm congestion in public learning institutions in Australia (Herath & Bentley, 2018).

Due to increased enrolment, there are increased respiratory infections among students in the dormitories, supported by (36.9%) of the students. Overcrowding can increase the risk of respiratory infections because it makes it easier for infections to spread from one person to another. Poor hygiene practices, such as inadequate ventilation, can accumulate airborne pathogens. This concurs with Ali et al. (2018), who found that overcrowded living conditions in university dormitories contributed to the spread of respiratory infections among students. Another study by Kim et al. (2018) found that dormitory overcrowding was associated with an increased risk of respiratory infections among university students. These findings support the need for institutions to prioritize investment in adequate accommodation facilities to promote students' health and well-being.

The findings from the table further show that there is usually much noise in the dormitories, whereby (75.2%) of the respondents agree with this statement. Noise levels in dormitories can also affect students' mental and emotional well-being. Living in a noisy environment can cause stress, anxiety, and depression. These negative emotions can, in turn, affect academic performance and overall quality of life. This is likely because more students mean more social activities, hence increased noise. This concurs with Erickson & Newman (2017) that the number of students in a dormitory significantly impacted noise levels. The study found that noise levels also increased as the number of students in the dormitories increased.

Most respondents (69.9%) agreed that more bathrooms in the dormitories are needed. A study conducted by the United Nations Children's Fund (UNICEF) in 2015 concurs that inadequate bathroom facilities are a significant problem in public boarding schools in developing countries. Furthermore, the study reported they had to queue longer to access the bathrooms. A significant majority of the respondents (70.2%) agreed that there is need for more toilets in dormitories, reflecting the challenges public boarding schools face in providing adequate accommodation services to their students. The findings resonate with Jasper and Bartram (2012), who found that more toilets in dormitories in Kenyan public boarding schools were needed. The study identified that many schools had inadequate toilet facilities, leading to a high risk of sanitation-related diseases. Appiah-Effah (2019), by researchers at the University of Ghana, found that providing adequate toilet facilities was a significant challenge in public boarding schools in Ghana, particularly in rural areas.

The finding that a significant majority of respondents (63.6%) agree and strongly agree that there is an inadequate water supply in the dormitories is a matter of concern. Inadequate water supply can lead to poor hygiene and sanitation practices, increasing students' risk of infectious diseases.

These findings align with Were (2014), who found that inadequate water supply was a significant challenge in public boarding schools in Kenya. The study identified that many schools had inadequate water supply, leading to poor hygiene and sanitation practices and an increased risk of infectious diseases among students. Another study conducted by Peprah et al. (2015) found that inadequate water supply was a significant challenge in public boarding schools in Ghana, particularly in rural areas.

Increased student enrolment denies students privacy in the dormitories (45.1%) of the students agreed. This finding suggests that the lack of adequate space and overcrowding in dormitories due to increased student enrolment compromises students' privacy. This finding is consistent with a study by Nemes and Mzimya (2015), who reported that the overcrowding of dormitories in public boarding schools in Tanzania was a significant challenge that compromised students' privacy. The study found that the lack of adequate space in dormitories due to increased student enrolment resulted in students sleeping in cramped conditions, compromising their privacy and dignity. The study supports the finding that increased student enrolment denies students privacy in dormitories, suggesting that this is a significant challenge facing public boarding schools in many countries. As the number of students enrolling in boarding schools continues to increase, there is a need to ensure that adequate accommodation services are provided to meet the growing demand.

### ***Qualitative Data Provided by Boarding Masters/Mistress and Matrons/Patrons***

Qualitative data from open-ended questions were analyzed through content analysis, where responses were categorized based on common themes or patterns and the percentages recorded. According to an analysis of the information collected from the boarding masters and mistresses, (37.5%) of them agreed that they have an acceptable number of dorms. The remaining respondents, (62.5%) reported that increased student enrolment had caused dormitory overpopulation. Congestion and decreased space were evident symptoms of this situation. This implies that most participants saw a negative impact of growing enrolment on dormitory facilities, emphasizing the need to solve congestion. A school O respondent mentioned, "*The dormitories are very congested as compared to the previous years.*" Kiruru and Ogola (2020) observed similar findings, that nearly all accommodation providers felt expansion was necessary due to population growth. This includes furniture like mattresses, desks, chairs, bookcases, as well as amenities like bathrooms and running water. This is also in line with the qualitative data where (65.9%) of the respondents agreed and strongly agreed that the increase in enrolment led to crowding in the dormitories.

A substantial majority of the participants, accounting for (69.2%) of the respondents, expressed that the increased student enrollment had a direct impact on the availability of bed spaces within the dormitories. Those that were unaffected ascribed their good fortune to triple or double decker beds and some students who were day scholars (31.8%). A single participant from school Q provided the following input; "*There is not enough room for beds in the dorms.*" These findings align with the conclusions drawn by Isiteketo and Nakamba (2019), which discovered that a majority of students expressed dissatisfaction with insufficient sleeping space, along with other issues such as overcrowding and a lack of essential facilities. The dramatic growth in student enrolment in schools is directly responsible for these problems. This supports the notion that the problems identified in the present study were not isolated incidents, but rather a recurring theme observed across different research investigations. The quantitative data further corroborates this

finding, indicating that a majority of respondents (59.3%) concurred with the notion that the surge in student enrollment directly resulted in a reduction of bed spaces within the dormitories. This statistical evidence strengthens the argument that the increase in student numbers has indeed led to limited bed spaces, aligning with the qualitative feedback provided by participants.

Respondents who agreed (15.4%) expressed dissatisfaction with the availability of sufficient beds in the dormitories, indicating a shortage. This finding suggests that a small percentage of participants perceived a lack of adequate sleeping arrangements within the dormitory facilities. However, this collaborate Jennifer (2011); increase in student enrollment is identified as one of several factors contributing to the inadequate availability of accommodation resources, specifically citing a shortage of beds in the sleeping areas. In contrast, an individual from school R provided input, stating, "We did not have enough beds." This is in agreement with Chiguvi and Ndoma (2018), who reported that a rise in student enrolment is one of the significant reasons for housing shortages in educational institutions with constant competition for beds and bed spaces in the sleeping areas. The quantitative data further supports this assertion, with a small percentage (8.2%) indicating the need for an increase in the number of beds within the dormitories to accommodate all students. This data strengthens the argument that there is a recognized necessity for additional beds to meet the accommodation needs of the student population.

Concerning the incidences of stealing in the dormitories, (58.3 %) agreed that reported cases have increased. These finding aligns with the conclusions drawn by Isiteketo and Nakamba (2019), who observed that a rise in security concerns in schools with the increased number of students. According to the study, weekly boarders encountered issues such as theft, immorality, poor housing, and absenteeism from class. Their academic performance was affected because of these issues. The findings also revealed that students no longer felt safe in school. A respondent from school O mentioned, "Theft cases have increased." The quantitative data (66.8) of the students also agree that with increased student enrolment that there have been rampant cases of stealing in the dormitories.

A majority (61.5%) of the respondents reported that increased enrolment affected the level of cleanliness/tidiness in the dormitories. A respondent from school P mentioned that; "Without constant vigilance, cleanliness of the dormitories deteriorates." This concurs with Waweru (2011), who cited that enrollment increased in public primary schools due to the introduction of free primary education, resulting in crowded and untidy compounds in the schools. The quantitative data further substantiate these findings, with a significant majority (71.3%) of the participants acknowledging the presence of untidy dormitories as a direct result of increased student enrollment. This statistical evidence reinforces the notion that the rise in enrollment has contributed to the lack of cleanliness and tidiness within the dormitory premises.

Two-thirds (66.7%) responded that increased enrolment affected the availability of toilets in the school. While (33%) disagreed and reported having enough toilets in the school despite the enrollment increase. A respondent from school T mentioned, "It has affected the availability of toilets, but some pit latrines are being dug out to accommodate this large enrolment." Another respondent from school O stated, "They are inadequate since the rate of their exhaustion has increased." This concurs with the findings of Egbinola and Amanambu (2015) in secondary schools in Ibadan, Nigeria; The study uncovered a considerable variation in the number of toilets available across the schools, ranging from 0 to 14. This discrepancy resulted in a student-to-toilet



ratio of 185:1 within the study area. Furthermore, the ratio varied significantly between different schools, with values ranging from 83:1 to 510:1. These findings highlight the notable disparity in toilet facilities and student access to sanitation infrastructure within the study region. The quantitative data collected from the students corroborate this observation, with a significant majority (70.2%) concurring that the availability of toilets is insufficient due to the impact of increased enrollment. This statistical evidence strengthens the argument that the rise in student numbers has led to a shortage of adequate toilet facilities, emphasizing the need for additional infrastructure to address this issue.

Less than half (46.2%) respondents disagreed that increased enrolment affected the frequency of respiratory infections among students. However, those who agreed (53.8%) attributed the increase in cases of respiratory infections to congestion. A Respondent from school Q stated, *"With increased enrolment, ventilation has been improved to curb this respiratory disease."* A school P respondent stated, *"Common cold has become too rampant."* This is contrary to Lubis et al. (2018), who noted that students in Indonesian schools need more room space and overcrowded rooms due to increased enrolment making it challenging to rest well and raising cases of respiratory infection among students. However, (36.9%) of the student respondents in the quantitative data supports that respiratory infections were due to increased student enrolment.

Similarly, a majority (58.3%) agreed that the influx of more students had a direct impact on noise pollution within the sleeping premises. Those who disagreed (41.7%) attributed that position to strict school rules, effective prefects, and girls who tend to be less noisy. A respondent from school U mentioned, *"So much noise from the dormitories, especially at night."* This resonates with the findings of Saggars (2015), which indicated that enormous number of registered students in Australian high schools, the presence of excessive classroom loudness, teachers raising their voices, and congested school environments can greatly increase students' stress levels and provide problems for their coping strategies. These conditions might make it harder for kids to deal with stress and adjust to new situations at school. According to the quantitative data, a significant majority of participants (65.2%) concurred that the increase in student enrollment directly contributed to a surge in noise pollution.

Respondents indicated (70%) that the bathrooms needed more to accommodate all the students. In comparison, (30%) stated enough bathrooms in the dormitories. Some of the respondents from the various schools mentioned that; *"The number of bathrooms available is overwhelmed by the number, but the administration of the school has made more room for construction of more bathrooms with the increased number."* *"Bathrooms are inadequate, but shift operations have been put in place."* This resonates with the findings of Jagero (2011), who reported the primary challenges encountered by students residing in boarding residence include inadequate boarding facilities. These facilities include bathrooms, water, and toilets. The quantitative data from this study (69.9%) further indicates that due to the increased enrollment, more bathrooms must be needed to accommodate all the students adequately.

Similarly, most (58.3%) respondents believed increased enrolment affected the school water supply. They attributed this to the construction of additional facilities. Here are the sentiments of respondents from schools T, V, and U, respectively *"Too much pressure has been executed on the available facilities"*. *"Water supply is inadequate."* This is in agreement with Jagero et al. (2010), who assert that inadequate water or regular water supply is one of the significant.

The study examined the impact of environmental factors on academic performance among both male and female students in boarding secondary schools, with the aim of fostering educational excellence. This is also in line with the quantitative data where (72.5%) of the respondents supported, that insufficient water supply was due to increased student enrolment in the school. A significant proportion (50.0%) of the participants acknowledged that the increased enrollment had a negative impact on the students' privacy within the dormitories. This finding implies that the rise in student numbers has compromised the level of privacy experienced by students in these shared living spaces. In contrast, the rest of the respondents held a contrary opinion. A respondent from school S mentioned, "*Students' privacy is limited because of congestion in the dormitories, and students sleep in open rooms.*" Furthermore, a study conducted by Kimwaga et al. (2014) found that girls in boarding schools encounter several challenges, including a lack of privacy in toilets, insufficient access to sanitary pads, and inadequate sleeping areas to attend to emergency needs. These qualitative observations align with the quantitative data from this study, which also supports the concept that increased student enrollment negatively affects students' privacy, as indicated by (45.1%) of the respondents.

Ngala (2018) found that the condition of students' facilities significantly influences their academic performance and achievements. It is crucial to improve these facilities without burdening students with excessive fees. When deciding on a facility, students primarily consider the following criteria: safety, facilities, power and water availability, room diameter, number of inhabitants, ventilation, freedom, privacy, and closeness to lecture rooms, hostel administration, and drainage system. Privacy was also shown to be a crucial component in the study. Additionally, the report highlighted the need for better hostels in public tertiary colleges in Nakuru. Providing students with an ideal environment, including improved accommodation, fosters learning, enhances well-being, and improves living conditions.

**Correlation Analysis**

The relationship between enrolment and accommodation services delivery was determined using the Pearson Product Moment Correlation Coefficient. It involved correlating the number of enrolled students with the delivery of accommodation services overall mean. The results of the procedure are in Table 3.

**Table 3:**  
*Correlation Analysis*

Scale	Accommodation mean scores
Enrolment	Pearson Correlation
	p-value
	N

The results indicate that the relationship between student enrolment and delivery of accommodation services was negative and statistically significant at a .05 confidence level,  $r(294) = -.255, p = .000$ . A correlation coefficient of -0.255 indicates a negative correlation between student enrollment and the delivery of accommodation services. As student enrollment increases, the delivery of accommodation services tends to decrease, or vice versa. The results, therefore, show that as student enrolment increases in public secondary schools in Kisumu West Sub- County, Kenya, the delivery of accommodation services decreases. According to Aluko

(2011), in an assessment of student accommodation in Nigerian Universities. The study aimed to assess the demand and supply of student accommodation in Nigerian universities and determine the relationship between student enrolment and accommodation supply. The results of the study showed that there was a high demand for student accommodation. The study also found a negative correlation between student enrolment and accommodation delivery, which was statistically significant. The researchers attributed the deficit in accommodation to the increasing student enrolment, inadequate funding for hostel construction, and poor maintenance culture.

### Hypothesis testing

The following criteria was used as the study's baseline for Hypothesis Testing: The null hypothesis would be rejected if the p-value were less than 5%, whereas the alternative hypothesis would be accepted. i.e.

Reject  $H_0: \beta_x = 0$ ; if  $p < 0.05$ ,  
Otherwise, accept the  $H_0: \beta_x = 0$

**$H_0$** : Student enrollment has no statistically significant relationship with the delivery of accommodation services in public boarding secondary schools in Kisumu West sub-county, Kenya.

To determine if this correlation is statistically significant, a p-value was calculated. The p-value of 0.000 indicates that the probability of obtaining a correlation coefficient of -0.255 or more extreme by chance alone is extremely low. Thus, substantial evidence suggests that the observed correlation is not due to random chance. A significance level or alpha level ( $\alpha$ ) of 0.05 was used in this analysis. Since the obtained p-value is less than 0.05, we reject the null hypothesis. Therefore, we can conclude that there is a statistically significant negative relationship between student enrollment and the delivery of accommodation services in public boarding secondary schools in Kisumu West Sub- County, Kenya. This finding corroborates with Asamba (2022), which established that classrooms, science laboratories, and playing fields needed to be improved due to the 100 percent transition policies in secondary schools. In addition, the researcher established that teaching and learning resources need to be improved to promote institutional success, and many students in the school are motivated to learn with the adequacy of learning materials.

According to Njenga (2019), the increase of students in secondary school due to the 100% transition policy has affected the availability of school facilities such as sanitation, teaching and learning space, sports facilities, and equipment. The study researcher indicated that increased student enrolment influences the increase in school facilities.

## IV. DISCUSSION

The findings revealed that increased student enrolment contributed to poor delivery accommodation services in the public secondary schools in Kisumu West sub-county, Kenya. The data collected from closed-ended items were analyzed, and the descriptive statistics of accommodation services were calculated from the students' responses. The quantitative data was also obtained from the boarding masters/mistress. The majority of respondents agreed and strongly agreed that an increase in enrolment leads to crowding in the dormitory, fewer bed spaces, increased theft, and untidy living conditions. Moreover, sharing beds and inadequate supply of bathrooms, toilets, and water in the dormitories were also reported. The findings

indicate that overcrowding in dormitories can negatively affect students' well-being. Schools must invest in upgrading and expanding their accommodation facilities to accommodate the growing student population and ensure their safety and security.

The study recommends that measures such as security cameras, locks, and security personnel should be put in place to prevent theft and other security-related issues in overcrowded dormitories. The study reveals that schools' initiatives are not sufficient to cater to the needs of the enrolled number of students. This can have serious implications on the health and wellbeing of students, and may also affect their overall satisfaction with the school.

A negative correlation was found in the relationship between increased student enrolment and the delivery of accommodation services, suggesting that when the number of students increases, the accommodation services in the respective schools decreases. This means that schools need to be proactive in ensuring that they have adequate resources to cater to the growing number of students. To address the challenges highlighted in the study, schools can take several steps. One approach could be to invest in the construction of additional accommodation facilities to cater to the increasing number of students. Schools can also consider implementing measures to enhance hygiene and cleanliness in dormitories to prevent the spread of infections. Furthermore, schools can provide students with training on personal hygiene practices and encourage them to maintain cleanliness in their living spaces.

### **Conclusion**

The findings reveal a statistically significant negative correlation. The study concludes that increased student enrollment leads to inadequate accommodation facilities, such as overcrowding in dormitories, lack of beds, and limited student study space among others. This highlights the need for more investment in public school infrastructure to cater to the growing student population.

### **Recommendations**

The government will use this information to find ways of eliminating future over-enrolment in secondary schools and develop ways of coping with enrolment in schools with a high population. Policymakers should use this data to devise measures to ensure that accommodation services for all students who join public boarding secondary schools are catered for.

## V. REFERENCES

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