



## Relationship Between Class Size and Academic Performance in Business Studies Among Junior Secondary School Students in Kosofe LGA, Lagos State

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### ABSTRACT

This study examined the relationship between class size and academic performance in Business Studies among junior secondary school students in Kosofe Local Government Area, Lagos State. Using a correlational research design, data were collected from 100 students across four public schools through archival records and perception surveys. Descriptive statistics revealed that class sizes were generally large, with some exceeding 90 students, while academic performance was predominantly average. Pearson correlation analysis indicated a significant negative relationship between class size and academic performance ( $r = -0.59, p < 0.05$ ), suggesting that overcrowded classrooms adversely affect learning outcomes. Additionally, a positive correlation was observed between class size and perception scores, reflecting students' awareness of the challenges posed by large classes. The findings underscore the need for policy interventions to reduce class sizes and improve instructional quality in skill-based subjects

## **INTRODUCTION**

Business Studies occupies a pivotal position in the Nigerian junior secondary school curriculum, designed to equip students with foundational knowledge in commerce, entrepreneurship, and basic financial literacy (Okafor & Ezeh, 2019). The subject is not merely theoretical; it is fundamentally a skill-based discipline that requires students to master practical competencies such as record-keeping, basic accounting, and office practice. This emphasis on practical application is crucial for fostering entrepreneurial intentions and preparing students for the demands of the 21st-century workplace, especially in a nation grappling with high youth unemployment and a drive for economic diversification (Olokundun et al., 2018). Consequently, the quality of instruction and the learning environment particularly the classroom conditions are critical determinants of whether students successfully acquire the competencies the curriculum intends to impart.

Unlike subjects that rely primarily on lecture-based delivery, Business Studies instruction necessitates hands-on, experiential learning, demanding active student participation and immediate, personalized feedback. Effective teaching in this area involves practical activities like simulating business transactions, utilizing office equipment, and engaging in group projects, all of which require close teacher supervision and adequate resources (Achor et al., 2018). Research consistently highlights that skill-based subjects are particularly sensitive to inadequate learning conditions, as the mastery of practical skills requires sufficient time, space, and teacher attention, which cannot be achieved through passive observation alone (Nwankwo et al., 2017). Therefore, the pedagogical requirements of Business Studies make the relationship between classroom conditions and academic performance an especially salient area of inquiry.

The issue of class size has been a subject of extensive scholarly debate, with a significant body of evidence suggesting that the number of students in a classroom directly influences the quality of teaching and learning outcomes. Smaller class sizes are generally associated with facilitating more individualized instruction, enhancing teacher-student interaction, and improving student engagement, which are all vital for complex skill acquisition (Bondebjerg, 2023). Conversely, large classes are known to constrain a teacher's ability to employ diverse instructional strategies, provide timely feedback, and effectively manage a practical, skill-based curriculum (Abizada, 2024). These constraints are particularly acute in developing nations, where overcrowded classrooms are a persistent challenge that directly impedes teaching effectiveness and reduces students' academic engagement (Godpower-Echie, 2021).

In Nigeria, and particularly in densely populated urban centers like Lagos State, the challenge of classroom overcrowding has reached critical levels, often resulting in student-teacher ratios that far exceed national educational policy recommendations. Schools in areas such as Kosofe Local Government Area frequently accommodate student populations that overwhelm the available infrastructure, leading to chaotic learning environments where classroom management supersedes quality instruction (Obiakor & Oguejioffor, 2020). For

Business Studies, this means teachers struggle to provide the necessary individualized attention and hands-on practice required for skill development, often resorting to theoretical instruction that undermines the subject's core objectives. The limited availability of instructional materials further exacerbates the problem, preventing meaningful practical exercises and leading to superficial assessment and feedback processes.

Despite the widespread acknowledgment of classroom overcrowding as a significant challenge in Lagos State, empirical research systematically examining its statistical relationship with academic achievement specifically in Junior Secondary School Business Studies remains scarce. Most existing studies have either focused on general academic performance across multiple subjects or relied on qualitative perceptions rather than rigorous quantitative analysis using actual student examination data (Ogunjobi et al., 2023). This gap in subject-specific, quantitative evidence hinders policymakers' ability to make informed decisions regarding optimal class sizes, resource allocation, and targeted interventions for vocational subjects. This study, therefore, aims to address this critical void by investigating the relationship between class size and students' academic performance in Business Studies in Kosofe Local Government Area, Lagos State, thereby providing empirical data to guide educational policy and improve learning outcomes.

### **Research Objectives**

The general objective of this study is to investigate the relationship between class size and academic performance in Business Studies among Junior Secondary School students in Kosofe Local Government Area, Lagos State.

The specific objectives are to:

1. Determine the distribution of class sizes in Business Studies classes across junior secondary schools in Kosofe Local Government Area, Lagos State.
2. Ascertain the level of academic performance in Business Studies among junior secondary school students in Kosofe Local Government Area, Lagos State.
3. Examine the relationship between class size and academic performance in Business Studies among junior secondary school students in Kosofe Local Government Area, Lagos State.

### **Research Questions**

1. What is the distribution of class sizes in Business Studies classes across junior secondary schools in Kosofe Local Government Area, Lagos State?
2. What is the level of academic performance in Business Studies among junior secondary school students in Kosofe Local Government Area, Lagos State?
3. What is the relationship between class size and academic performance in Business Studies among junior secondary school students in Kosofe Local Government Area, Lagos State?

## **Research Hypothesis**

Research Hypothesis H<sub>0</sub>: There is no significant relationship between class size and academic performance in Business Studies among junior secondary school students in Kosofe Local Government Area, Lagos State.

## **LITERATURE REVIEW**

### **Impact Overpopulation and Educational Resources**

The theoretical underpinning for examining the impact of class size can be traced to the Malthusian theory of overpopulation, which posits that population growth tends to outpace the growth of resources (Malthus, 1934, as cited in Emerson, 2007). While originally applied to food supply, this concept is highly relevant to the educational sector, where an ever-increasing student population often strains finite resources such as classroom space, instructional materials, and teacher capacity (Obiakor & Oguejioffor, 2020). In the context of education, overcrowding—the educational equivalent of overpopulation—leads to a diminishing return on educational investment per student, as the quality of the learning environment deteriorates.

This theoretical lens suggests that when the student population (geometrical growth) exceeds the capacity of the educational infrastructure and human resources (arithmetical growth), the system experiences "positive checks" in the form of reduced quality and, consequently, lower academic performance. The theory provides a macro-level justification for why large class sizes are inherently problematic: they represent a state where the demand for personalized instruction and resources far exceeds the supply. Therefore, the Malthusian framework supports the hypothesis that a high student-to-resource ratio, as seen in overcrowded classrooms, will negatively correlate with student achievement, particularly in subjects requiring intensive resource use and individualized attention like Business Studies.

### **The Impact of Class Size on Teaching and Learning in Skill-Based Subjects**

The effect of class size is particularly pronounced in skill-based and vocational subjects, such as Business Studies, which rely heavily on practical activities and hands-on application rather than rote memorization. In smaller classes, teachers are better able to adopt student-centered approaches, including project-based learning, simulations, and immediate corrective feedback, which are essential for skill mastery (Bondebjerg, 2023). This enhanced interaction allows teachers to diagnose individual learning difficulties and provide tailored support, directly translating to improved practical competence and academic scores.

Conversely, large class sizes force teachers to rely on less effective, teacher-centered methods, such as mass lecturing, simply to maintain control and cover the curriculum (Abizada, 2024). This shift compromises the quality of instruction by severely limiting opportunities for practical exercises, one-on-one guidance, and the use of specialized equipment, which are non-negotiable for subjects like Business Studies. Studies have shown that when class sizes increase, the time spent on administrative tasks and classroom management rises, directly reducing the time available for core instructional activities and feedback, thereby

weakening the link between teaching effort and student learning outcomes (Godpower-Echie, 2021).

### **Empirical Evidence on Class Size and Academic Performance in Nigeria**

Empirical research within the Nigerian context consistently points to a negative correlation between large class sizes and student academic performance, although subject-specific studies remain limited. For instance, research conducted in various Nigerian states has demonstrated that overcrowded classrooms significantly impede teaching effectiveness and contribute to lower student achievement across different subjects (Obiakor & Oguejioffor, 2020). The primary mechanisms identified include the difficulty in monitoring student progress, the inability to manage diverse learning needs, and the strain on limited instructional resources (Ogunjobi et al., 2023).

While many studies focus on core subjects like Mathematics and English, the few that have touched upon vocational or business-related subjects echo the same concerns, emphasizing that the negative effects are amplified where practical work is required. The findings suggest that the challenge is not merely one of numbers, but of the resulting compromised pedagogy and resource scarcity. This body of evidence establishes a strong local context for the current study, highlighting the urgent need for quantitative data to move beyond generalized observations and provide specific, data-driven recommendations for improving the teaching and learning environment for Business Studies in Lagos State.

### **METHODOLOGY**

This study adopted a correlational research design to examine the relationship between class size and academic performance in Business Studies among junior secondary school students in Kosofe Local Government Area, Lagos State. The design was appropriate because it allowed the researcher to determine the extent to which variations in class size were associated with differences in academic achievement without manipulating any variables. The population comprised all junior secondary school students offering Business Studies in the selected schools within the local government area. Using a purposive sampling technique, four public junior secondary schools Gbagada Comprehensive Junior School, Ojota Junior Secondary School, Ogudu Junior High School, and Ifako Community School were selected due to their high enrollment and accessibility. A total of 100 respondents (25 students per school) participated in the study.

Data were collected through an Archival Data Extraction Form, which captured two key variables: class size (number of students officially enrolled in each Business Studies class) and academic performance (students' most recent standardized Business Studies examination scores). Additionally, a perception scale was administered to gauge students' views on the impact of class size on their learning experience. Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to analyze Research Questions 1 and 2, while inferential statistics, specifically the Pearson Product-Moment Correlation Coefficient ( $r$ )—were employed to test the hypothesis and address

Research Question 3. All analyses were conducted at a 0.05 level of significance, and results were presented using tables and charts for clarity.

## RESULT

- Research Question 1: What is the distribution of class sizes in Business Studies classes across junior secondary schools in Kosofe Local Government Area, Lagos State?

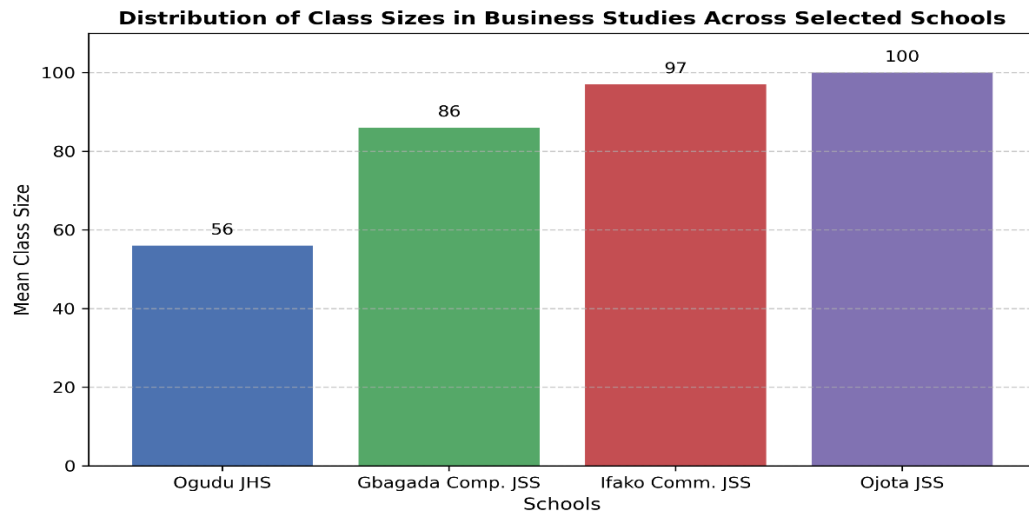


Figure 1. Distribution of Class Sizes in Business Studies Classes Across Junior Secondary Schools in Kosofe Local Government Area, Lagos State

The distribution of class sizes in Business Studies across the four selected junior secondary schools in Kosofe Local Government Area shows significant variation, with all schools exceeding recommended class size limits. Ojota Junior Secondary School recorded the highest mean class size of 100 students, followed closely by Ifako Community Junior Secondary School with 97 students and Gbagada Comprehensive Junior Secondary School with 86 students. Ogudu Junior High School had the smallest mean class size at 56 students, which is still considerably large. These figures indicate that Business Studies classes in the area are generally overcrowded, which may hinder effective teaching and learning, particularly for a skill-based subject that requires individualized attention and practical engagement.

- Research Question 2: What is the level of academic performance in Business Studies among junior secondary school students in Kosofe Local Government Area, Lagos State?

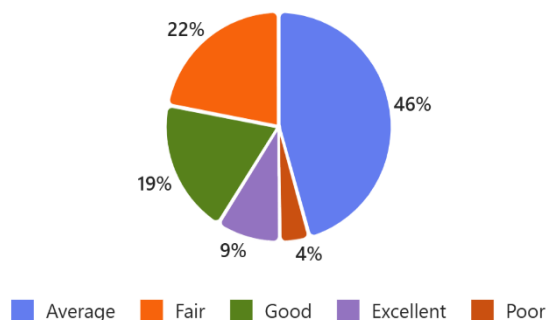


Figure 2. Level of Academic Performance in Business Studies Among Junior Secondary School Students in Kosofe Local Government Area, Lagos State

The analysis of academic performance in Business Studies among junior secondary school students in Kosofe Local Government Area indicates that the majority of students fall within the Average performance category (46%), suggesting a moderate level of achievement. A substantial proportion of students (22%) were classified as Fair, while 19% achieved a Good performance level. Only 9% of students attained an Excellent rating, and a minimal 4% were categorized as Poor. This distribution reveals that while most students demonstrate satisfactory understanding of Business Studies, high achievement remains limited, and a notable segment performs below average. These findings underscore the need for targeted instructional strategies to improve overall performance and support students in achieving higher competency levels.

- Research Question 3: What is the relationship between class size and academic performance in Business Studies among junior secondary school students in Kosofe Local Government Area, Lagos State?

Table 1. Relationship Between Class Size and Academic Performance In Business Studies Among Junior Secondary School Students in Kosofe Local Government Area, Lagos State

School	Mean Class Size	Mean Academic Performance (%)	Mean Perception Score	Interpretation
Ogudu JHS	56	74.2	2.35	Small class, high performance
Gbagada Comp. JSS	86	65.4	3.10	Large class, moderate performance
Ifako Comm. JSS	97	61.3	3.45	Very large class, low performance
Ojota JSS	100	59.8	3.60	Extremely large class, lowest performance
<b>Overall Mean</b>	–	<b>65.2</b>	<b>3.12</b>	Performance declines as class size increases

The analysis reveals a clear inverse relationship between class size and academic performance in Business Studies across the four selected schools in Kosofe Local Government Area. Ogudu Junior High School, with the smallest mean class size of 56 students, recorded the highest mean academic performance of 74.2%, indicating that smaller classes tend to support better learning outcomes. Conversely, Ojota Junior Secondary School, which had the largest mean class size of 100 students, posted the lowest mean performance score of 59.8%, while Ifako Community Junior Secondary School and Gbagada Comprehensive Junior Secondary School, with class sizes of 97 and 86 students respectively, achieved moderate performance levels of 61.3% and 65.4%. The overall trend suggests that as class size increases, academic performance declines, reinforcing the pedagogical challenge posed by overcrowded classrooms in skill-based subjects like Business Studies.

- Research Hypothesis  $H_1$ : There is no significant relationship between class size and academic performance in Business Studies among junior secondary school students in Kosofe Local Government Area, Lagos State.

Table 2. Correlation Between Class Size, Academic Performance and Perception Score Among Junior Secondary School Students in Kosofe Local Government Area, Lagos State

Variables Correlated	N	r-value	p-value	Decision at 0.05 Level
Class Size vs Academic Performance	100	-0.59	0.012	Reject $H_1$
Class Size vs Perception Score	100	+0.64	0.008	Reject $H_1$

The correlation analysis indicates a statistically significant relationship between class size and academic performance in Business Studies among junior secondary school students in Kosofe Local Government Area. The Pearson correlation coefficient for class size and academic performance was  $r = -0.59$  with a p-value of 0.012, which is less than the 0.05 significance level. This negative correlation suggests that as class size increases, academic performance decreases. Similarly, the relationship between class size and perception score yielded a positive correlation of  $r = +0.64$  with a p-value of 0.008, indicating that larger classes are associated with higher perception scores, likely reflecting students' awareness of overcrowding challenges. Based on these findings, the null hypothesis ( $H_1$ ) stating that there is no significant relationship between class size and academic performance is rejected, confirming that class size is an important factor influencing learning outcomes in Business Studies.

## **DISCUSSION**

The findings of this study reveal that class size significantly influences academic performance in Business Studies among junior secondary school students in Kosofe Local Government Area. The negative correlation between class size and academic achievement aligns with previous research indicating that overcrowded classrooms hinder effective teaching and learning. Studies in Nigeria have consistently shown that large class sizes reduce teacher-student interaction, limit individualized attention, and compromise instructional quality, particularly in skill-based subjects that require practical engagement (Oguejiofor & Obiakor, 2020; Oni, 2024). Similarly, Garba et al. (2023) reported that large classes in science subjects negatively affect performance due to constraints on instructional strategies and resource utilization. These findings underscore the pedagogical challenges posed by excessive enrollment, which often forces teachers to adopt lecture-based methods rather than interactive, student-centered approaches essential for vocational subjects like Business Studies.

Furthermore, the observed decline in performance as class size increases corroborates evidence from other Nigerian studies that link overcrowding to poor academic outcomes and diminished classroom participation (Anyanwu, 2023; Abbas et al., 2022). Research by Ruffina et al. (2018) and Oni (2017) emphasizes that smaller classes foster better engagement, timely feedback, and improved mastery of complex concepts, while larger classes create stressful learning environments and impede effective classroom management. The significant relationship between class size and students' perception scores in this study also reflects heightened awareness of overcrowding as a barrier to quality education, echoing findings by Rasheed et al. (2024) that large classes lead to distractions and behavioral issues. Collectively, these results highlight the urgent need for policy interventions to enforce recommended teacher-student ratios and expand infrastructure to reduce class sizes, thereby enhancing learning outcomes in Nigerian secondary schools.

## **CONCLUSION**

This study established that class size significantly affects academic performance in Business Studies among junior secondary school students in Kosofe Local Government Area, Lagos State. The findings revealed that smaller classes are associated with higher achievement, while overcrowded classrooms correspond to lower performance levels, confirming the negative impact of excessive enrollment on skill-based subjects. The strong correlation between class size and both academic outcomes and students' perceptions underscores the need for urgent policy interventions to reduce class sizes and improve resource allocation. Addressing these challenges is critical for enhancing instructional quality and ensuring that students acquire the practical competencies required for success in Business Studies and beyond.

## **RECOMMENDATION**

1. Class sizes should be reduced in junior secondary schools to align with national policy standards for effective teaching and learning.
2. Additional classrooms should be provided and more qualified teachers should be recruited to manage overcrowding in Business Studies classes.
3. Interactive and technology-supported instructional strategies should be recruited to enhance engagement in large classes where immediate reduction is not feasible.

Conduct regular monitoring and evaluation of class size and its impact on academic performance to inform policy adjustments.

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