

OVERCROWDED LECTURE ROOMS AND ITS IMPLICATIONS ON ACADEMIC EXPERIENCES OF UNDERGRADUATES IN UNIVERSITY OF ILORIN, NIGERIA

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Abstract

Overcrowded lecture room refers to a lecture hall that holds more students than its designed capacity, leading to a lack of sufficient space for each student. This study examined the implications of overcrowded lecture rooms on academic experiences of Undergraduates in University of Ilorin. The objectives were to examine if; poor assimilation, lack of concentration and poor teacher-students relationship were implications of overcrowded lecture rooms on academic experiences. Descriptive research of survey type was adopted for the study. The population comprised all undergraduates in University of Ilorin, totalling 49,587, out of which 423 were sampled through multistage sampling procedure of proportionate and simple random sampling. Researcher-developed structured questionnaire, validated by three experts to check for both face and content validity was used for the study. The reliability was ascertained through test re-test method, the data collected were analysed using Pearson Product Moment Correlation, that yielded a correlation coefficient of $r = 0.76$. Percentage and Chi-square statistics were employed for data analysis at 0.05 Alpha level. The findings revealed that poor assimilation, (Cal. χ^2 val. 450.213 > Crit. χ^2 val. 16.92); poor concentration, (Cal. χ^2 val. 204.894 > Crit. χ^2 val. 16.92); and poor teachers-students relationship (Cal. χ^2 val. 393.856 > Crit. χ^2 val. 16.92) with a degree of freedom of 9 at 0.05 alpha level. Based on these findings, the study concluded that, poor assimilation, poor concentration and poor teachers-students relationship were implications of overcrowded lecture rooms on academic experiences of the University of Ilorin students. It is therefore recommended, among others that the University authority should reduce class sizes by increasing the number of lecture rooms and divide large classes among many lecturers to reduce the number of students per lecture.

Keywords: Overcrowding; Lecture Rooms; Implications, Academic Experiences, Assimilation, Concentration and Teacher-Students Relationships

Introduction

In recent years, many universities have witnessed a significant increase in student enrolment, without corresponding increase in physical infrastructure, and as a result, overcrowded lecture rooms have become a prevalent issue, especially in many federal universities in Nigeria. This situation is becoming worse by limited resources, outdated infrastructure, and sometimes inadequate planning by university authorities. Such overcrowding may not only disrupt the learning process but also contribute to various mental, psychological and emotional challenges for students. A conducive learning environment for peaceful academic experiences are crucial for academic success and mental well-being of students. Classrooms serve as spaces not only for instruction but also for the overall academic and social experience of students where students can focus, engage, and participate effectively in learning process. (Adesina & Akinwale, 2021). An overcrowded lecture room refers to a classroom or lecture hall that has

more students than its designed capacity, leading to a lack of sufficient space for each student. This results in limited physical space, making it difficult for students to move around, access materials, or engage fully in the learning process (Ogunseye, 2021).

Overcrowding may involve both the number of students exceeding seating capacity as well as a shortage of resources, such as adequate ventilation, proper seating arrangements, or functioning equipment. When lecture halls exceed their capacity, students face challenges in focusing and comprehending the material being taught. Overcrowding often results in insufficient seating, leaving some students standing or sitting uncomfortably in crowded spaces. This physical discomfort disrupts their ability to concentrate on the lecture content, causing fragmented understanding, concentration and shallow assimilation of key concepts. Noise levels, poor visibility, and strained audibility also hinder effective learning, leaving students disengaged and unable to grasp the subject matter fully. These conditions create an environment where academic goals are not adequately met, further affecting the mental health of students as they struggle to cope with academic demands in such unfavourable conditions (Jamal, Hassan & Iqbal, 2021).

Academic experience refers to the knowledge, skills, and practical background a person gains within an educational setting such as a school, college or university. Academic experiences in university settings is the collective process of learning, teaching and scholastic engagement within higher education environment. The core components of classroom experiences include, attending lectures, participating in seminars in conducive environment. It also includes intellectual growth, self-motivation for skill building and Teachers-Students interactions (Eze & Nwachukwu, 2021). According to Jamal, Hassan and Iqbal, (2021), some of the factors that have implications on academic experiences include, but not limited to, health and well-being, academic resources, such as class room size, library, laboratory and other campus facilities like WI-FI and quality teaching.

Mental health plays a crucial role in students' academic success. Psychological well-being is strongly linked to cognitive functions such as memory, attention, and problem-solving, all of which are essential for quality academic experiences. Overcrowded classrooms, however, often exacerbate mental health issues such as anxiety, stress, and depression. These conditions can cause poor concentration, reduced cognitive abilities, and disengagement from academic activities. Students experiencing mental health challenges in overcrowded environments are more likely to underperform academically due to these cognitive and emotional distractions. High levels of stress and anxiety can impair cognitive functions, making it difficult for students to focus on lessons or retain information (Adesina & Akinwande, 2019). Kato, (2019), found out that overcrowded lecture halls may severely impair rate of assimilation, which is the process of taking in and fully understanding information. The stress that often accompany overcrowded lecture halls often creates both physical and mental barriers to quality academic experiences and learning. According to Ibrahim, (2021), the various ways by which overcrowded lecture halls can hinder assimilation includes, causing physical discomfort as a result of poor ventilation, increased distractions as a result of side conversation and background noise, making it hard to hear the lecturer clearly, and impaired visibility.

Lack of concentration is a common feature of overcrowded lecture halls, where distractions are pervasive due to the sheer number of individuals sharing the same space. The environment becomes chaotic, with constant chatter, movement, and interruptions from peers, all of which detract from the lecture's focus. Students often find it challenging to maintain their attention for prolonged periods under such conditions, which has implications on the effectiveness of academic activities. This inability to concentrate during lectures contributes to a cycle of disengagement and frustration, as students struggle to retain critical information and keep up with the curriculum. The mental strain of navigating such an environment further compounds their difficulties, leaving them mentally exhausted and less motivated to participate in academic

activities (Yusuf & Adigun, 2020). Overcrowding has been linked to several detrimental effects, such as physical health issues, psychological effects, and social and behavioural consequences. Physical health issues such as poor air quality, increased noise, and lack of proper sanitation are common consequences of overcrowded environments, leading to respiratory problems, fatigue, and sleep disturbances (Adebayo & Ojo 2021).

One of the most common consequences of overcrowding is the deterioration of indoor air quality. In crowded classrooms with inadequate ventilation, the accumulation of carbon dioxide from breathing and increased humidity levels can cause discomfort and health problems. Research conducted by BMC Public Health, (2019) reported that poor air quality is linked to respiratory issues such as asthma, coughing, and shortness of breath. Moreover, exposure to such conditions can lead to fatigue and difficulty concentrating. Long-term exposure to low air quality can also aggravate respiratory conditions and lead to chronic fatigue syndrome, which affects cognitive performance and overall well-being. According to Johnson (2018), crowded environments are often linked to increased levels of stress, anxiety, and frustration. When students are forced to spend long hours in such environments, it can lead to a decline in their overall well-being, affecting not only their academic performance but also their social interactions and personal development. Mental health challenges like stress, anxiety, and depression can emerge as a result of the pressures associated with managing crowded spaces while simultaneously trying to meet academic demands.

The reason for overcrowded lecture rooms in the Nigerian universities, especially the University of Ilorin are numerous, one of the topmost causes is increased student enrolment. The university has experienced a steady increase in student enrolment due to factors like the expansion of academic programs, higher demand for university education, and the population growth in Nigeria. However, the expansion of physical infrastructure has not kept pace with this increase in student numbers, resulting in overcrowded lecture rooms (Adesina, 2019). Lack of sufficient infrastructure development stands at the top of the causes of overcrowded lecture rooms in Nigerian universities. Despite the growing number of students, there may be insufficient investment in expanding infrastructure such as lecture halls, auditoriums, and seminar rooms. While overcrowded lecture rooms has negative impact on the overall performance of students, under-crowded lecture rooms provide a more conducive environment for students to engage in discussions, ask questions, and participate actively in class. With fewer distractions, students are more likely to concentrate on the subject matter (Adeniran, 2021). Smaller lecture rooms allow for more personalized attention from the lecturer, fostering a supportive learning environment, improving the chances for students to clarify doubts, engage in meaningful discussions, and receive guidance tailored to their individual needs.

Statement of the Problem

The increasing enrolment of students in Nigerian universities, particularly the University of Ilorin, has outpaced the availability of physical infrastructure, leading to overcrowded lecture rooms. This situation not only compromises the quality of education but also poses significant threats to the academic experiences of students. Overcrowded classrooms are characterized by insufficient seating arrangements, poor ventilation, excessive noise levels, and limited lecturer-student interaction, all of which create stressful learning experiences. When academic experiences are free from stress, there is high chance of better learning experiences. Overcrowded lecture rooms in public universities often have adverse implications on students' academic experiences which in turn may have adverse effect on the overall academic performances of students. There is therefore the need to find a lasting solution to the problem whenever it exists. Students also frequently reported feelings of frustration, anxiety, and reduced motivation due to the discomfort and distractions in overcrowded spaces. In the University of Ilorin, anecdotal evidence and preliminary observations indicate that

overcrowding is a recurring issue, particularly in introductory-level courses with high enrolment. Yet, limited empirical research exists on how this directly affects academic experiences of students. This gap underscores the need for an in-depth investigation into the implications of overcrowded lecture rooms on academic experiences of the undergraduates in the University of Ilorin.

Objectives of the Study

The main purpose of the study is to examine the implications of overcrowded lecture rooms on learning experiences of undergraduates in University of Ilorin, Nigeria. The objectives were to determine whether poor assimilation, examine if lack of concentration and poor teacher-student relationship were implications of overcrowded lecture rooms on learning experiences of undergraduate students in the University of Ilorin.

Research Questions

The following research questions were raised to guide the study:

1. What is the implication of overcrowded classrooms on level of assimilation, as an academic experience among undergraduate students of University of Ilorin, Nigeria?
2. What is the implication of overcrowded classrooms on level of concentration as an academic experience among undergraduate students of University of Ilorin, Nigeria?
3. What is the implication of overcrowded classrooms on level of Teachers-Students relationship among undergraduate students of University of Ilorin, Nigeria?

Hypotheses

1. Overcrowded lecture rooms have no significant implication on the level of assimilation, as an academic experience among undergraduates of University of Ilorin, Nigeria.
2. Overcrowded lecture rooms have no significant implication on the level of concentration, as an academic experience among undergraduates of University of Ilorin, Nigeria.
3. Overcrowded lecture rooms have no significant implication on the Teachers-Students relationship, among undergraduates of University of Ilorin, Nigeria

Significance of the Study

The significance of this study lies in its potential to raise awareness about the challenges of academic experiences facing the undergraduates due to overcrowded lecture rooms. The findings of the study are expected to provide valuable insights into how overcrowding negatively impacts students' academic experiences. This study will also be of great benefit to students generally, educators, university administrators, policymakers and future researchers. It will raise awareness for policy makers to see the need to urgently face the challenge of overcrowding as a result of shortage in general infrastructural facilities in the Federal Universities in Nigeria.

Methodology

The research design for this study was descriptive survey design. The population for the study consists of all undergraduate students in University of Ilorin. A multi-stage sampling technique was used for this study. Simple random sampling technique of simple balloting was used to select five (5) faculties out of fifteen (15) faculties in University of Ilorin. Proportionate sampling technique of 2% was used to select the 423 respondents. Simple random sampling technique was used to select the actual respondents. Section A focused on the demographic data of the respondents, while Section 'B' dealt with the item raised from the

research questions and hypotheses generated for this study. A Likert rating scale format of Strongly Agree (SA) 4, Agree (A) 3, Disagree (D) 2, and Strongly Disagree (SD) 1, was employed for this study. The face and content validity of the instrument was ascertained by 3 experts from the department of health promotion, University of Ilorin, while a Test re-test method of reliability was used to establish the reliability of the instrument. Twenty copies of the questionnaire were administered to twenty students two times within an interval of two weeks, at Kwara State University, Malete. A correlation co-efficient of $r=0.76$ was obtained after analysing the instrument using Product Moment Correlation Coefficient (PPMC). The questionnaires were distributed by the researcher and four trained research assistants. The completed instrument was collated, coded and analysed using frequency and percentages for the demographic data, and inferential statistics of Chi-Square was used to test the stated hypotheses at 0.05 alpha level of significance using SPSS version 23.0.

Table 1: Sample selected for the Study

S/N	Name of Faculties	Population Students Faculties	of per 2% of Students' Population	Actual Sample
1.	Communication and Information Science	3120	62.4	72
2.	Education	10,344	206.88	207
3.	Physical Science	3429	68.5	69
4.	Social Science	3730	74.6	
5.	Veterinary Medicine	511	10.22	
	Total	21,134	422.6	423

Source: University of Ilorin Academic Support Services, 2025)

Results

Answer to Research Questions

Research Question 1: What is the implication of overcrowded lecture rooms on level of assimilation of undergraduates in University of Ilorin?

Table 2: Percentile Analysis of implication of Overcrowded Lecture Rooms on level of assimilation

S/N	ITEMS	SA	A	Positive Response	D	SD	Negative Response
1	Overcrowded lecture rooms reduce the ability of students to clearly hear and understand lectures.	127 (30.0%)	253 (59.8%)	380 (89.8%)	32 (7.6%)	11 (2.6%)	43 (10.2%)
2	High noise levels in packed rooms hinder effective understanding of key concepts in the classroom.	108 (25.5%)	284 (67.1%)	392 (92.6%)	23 (5.4%)	8 (1.9%)	31 (7.4%)
3	The lack of personal space distracts students from focusing on the lecture content in the lecture room.	89 (21.0%)	300 (70.9%)	389 (91.9%)	28 (6.6%)	6 (1.4%)	34 (8.1%)

4	Poor ventilation in crowded lecture room negatively impacts cognitive processing of students	103 (24.3%)	261 (61.7%)	364 (86.0%)	53 (12.5%)	6 (1.4%)	59 (14.0%)
Mean		381 (90.1%)				42 (9.9%)	

Table 2 shows that the mean positive responses to the items are 381 (90.1%), which is significantly greater than the mean negative responses of 42 (9.9%). This implies that overcrowded lecture rooms have implication on the level of assimilation among undergraduate students at the University of Ilorin.

Research Question 2: What is the implication of overcrowded lecture rooms on the level of concentration of undergraduate students of University of Ilorin?

Table 3: Percentile Analysis of implication of overcrowded lecture rooms on level of concentration.

S/N	ITEMS	SA	A	Positive Response	D	SD	Negative Response
1	Excessive movement in overcrowded classrooms diverts students' focus from lessons.	84 (19.9%)	237 (56.0%)	321 (75.9%)	93 (22.0%)	9 (2.1%)	102 (24.1%)
2	The discomfort of shared seating arrangements in overcrowded lecture room disrupts sustained mental focus.	68 (16.1%)	254 (60.0%)	322 (76.1%)	82 (19.4%)	19 (4.5%)	101 (23.9%)
3	Overcrowding in lecture room creates a chaotic environment, leading to frequent distractions.	113 (26.7%)	182 (43.0%)	295 (69.7%)	118 (27.9%)	10 (2.4%)	128 (30.3%)
4	Limited teacher mobility in packed lecture rooms restricts personalized engagement and affects focus of students	86 (20.3%)	301 (71.2%)	387 (91.5%)	33 (7.8%)	3 (0.7%)	36 (8.5%)
Mean		331 (78.3%)				92 (21.7%)	

Table 3 shows that the mean positive responses to the items are 331 (78.3%), which is significantly greater than the mean negative responses of 92 (21.7%). This implies that overcrowded lecture rooms have implications on the level of concentration of undergraduate students at the University of Ilorin.

Research Question 3: What is the implication of overcrowded lecture rooms on Teachers-Students relationships of undergraduate students in the University of Ilorin?

Table 4: Percentile Analysis of Implication of Overcrowded Lecture Rooms on Teachers-Students relationships

S/N	ITEMS	SA	A	Positive Response	D	SD	Negative Response
1	Teachers struggle to identify students in large, packed classes.	73 (17.3%)	275 (65.0%)	348 (82.3%)	64 (15.1%)	11 (2.6%)	75 (17.7%)
2	Overcrowding in lecture room limits teacher interaction with individual students and reduces rapport.	85 (20.1%)	275 (65.0%)	360 (85.1%)	57 (13.5%)	6 (1.4%)	63 (14.9%)
3	The students struggle to communicate effectively with their teacher in overcrowded lecture rooms.	57 (13.5%)	152 (35.9%)	209 (49.4%)	134 (31.7%)	80 (18.9%)	214 (50.6%)
4	Students feel neglected due to the teacher's inability to address their needs individually in overcrowded lecture rooms	73 (17.3%)	246 (58.2%)	319 (75.5%)	98 (23.2%)	6 (1.4%)	104 (24.6%)
Mean				309 (73.0%)			114 (27.0%)

Table 4 shows that the mean positive responses to the items are 309 (73.0%), which is significantly greater than the mean negative responses of 114 (27.0%). This implies that overcrowded lecture rooms have implication on Teachers-Students relationship of undergraduate students at the University of Ilorin.

Hypotheses Testing

H0₁: Poor assimilation will not significantly be an implication of overcrowded lecture rooms as an academic experience among undergraduates in University of Ilorin.

Table 5: Chi-Square Analysis of Poor Assimilation as an Implication of Overcrowded Lecture Rooms on academic experience.

Variable	N	df	Cal. χ^2 value	Crit. χ^2 value	P value	Remark
Poor Assimilation as an Implication of Overcrowded Lecture Rooms on Mental Health	423	9	450.213	16.92	0.000	H0 ₁ Rejected

Table 4 shows the calculated chi-square value of 450.213 which is greater than the critical chi-square value of 16.92 (Cal. χ^2 val. > Crit. χ^2 val.) with a degree of freedom of 9 at 0.05 alpha level. Since the calculated χ^2 value is greater than the critical value, the null hypothesis which stated that poor assimilation will not significantly be an implication of overcrowded lecture rooms on academic experience of undergraduates in University of Ilorin was rejected. This implies that poor assimilation is a significant implication of overcrowded lecture rooms on academic experience of undergraduates in University of Ilorin.

H0₂: Poor concentration will not significantly be an implication of overcrowded lecture rooms on academic experience of undergraduates in University of Ilorin.

Table 6: Chi-Square Analysis of Lack of Concentration as an Implication of Overcrowded Lecture Rooms on academic experience.

Variable	N	df	Cal. χ^2 value	Crit. χ^2 value	P value	Remark
Lack of Concentration as an Implication of Overcrowded Lecture Rooms on Mental Health	423	9	204.894	16.92	0.000	H0 ₂ Rejected

Table 6 shows the calculated chi-square value of 204.894 which is greater than the critical chi-square value of 16.92 (Cal. χ^2 val. > Crit. χ^2 val.) with a degree of freedom of 9 at 0.05 alpha level. Since the calculated χ^2 value is greater than the critical value, the null hypothesis which stated that lack of concentration will not significantly be an implication of overcrowded lecture rooms on academic experience of undergraduates in University of Ilorin was rejected. This implies that poor concentration is a significant implication of overcrowded lecture rooms on academic experience of undergraduates in University of Ilorin.

H03: Poor Teachers-Students relationship will not be an implication of overcrowded lecture rooms on academic experience of undergraduates of University of Ilorin.

Table 7: Chi-Square Analysis of Poor Teachers-Students Relationship as an Implication of Overcrowded Lecture Rooms on academic experience

Variable	N	df	Cal. χ^2 value	Crit. χ^2 value	P value	Remark
Poor Teacher-Student Relationship as an Implication of Overcrowded Lecture Rooms on Mental Health	423	9	230.629	16.92	0.000	H0 ₄ Rejected

Table 7 shows the calculated chi-square value of 230.629 which is greater than the critical chi-square value of 16.92 (Cal. χ^2 val. > Crit. χ^2 val.) with a degree of freedom of 9 at 0.05 alpha level. Since the calculated χ^2 value is greater than the critical value, the null hypothesis which stated that poor teacher-student relationship will not significantly be an implication of overcrowded lecture rooms on academic experience of undergraduates in University of Ilorin was rejected. This implies that poor teacher-student relationship is a significant implication of overcrowded lecture rooms on academic experience of undergraduates in University of Ilorin.

Discussion of Findings

The results of the hypothesis one which stated that overcrowded lecture rooms will not have significant implication on level of assimilation of undergraduate students of University of Ilorin was rejected. This implies that overcrowded lecture rooms have significant implication on the level of assimilation of undergraduates in University of Ilorin. Overcrowded lecture hall significantly lowers rate of assimilation of students because distractions often drain mental energy, background noise disrupts short-term memory and visual distractions, (which is a common phenomenal), always cause frequent mind-wandering. Students can not ask clarifying questions that will help them understand the knowledge better and group work becomes logistically impossible. Some students can find it difficult to ask question for the fear of being radicle. This finding is in line with the finding of Freeman and Gochman (2017) who noted that students do experience mental health challenges that can hinder their rate of assimilation inside an overcrowded environments and they are more likely to under-perform academically due to these cognitive and emotional distractions.

The results of the tested hypothesis two shows that overcrowded lecture rooms have significant implication on the level of concentration of undergraduates in the University of Ilorin. The lack of space and proper ventilation in overcrowded classrooms often causes discomfort, contributing to fatigue and a lack of motivation, further impairing ability of the students to concentrate on the knowledge being imparted. In large, overcrowded classrooms, one of the primary consequences is the reduction in personalized attention by the lecturer. Teachers find it difficult to provide tailored instruction when there are too many students to be attended to. This finding is in line with the finding of Jamal et al., (2021), which affirmed that overcrowded lecture rooms lead to poor concentration due to distractions, which directly correlate with lower test scores and academic underachievement.

The results of the tested hypothesis three revealed that overcrowded lecture rooms have significant implication on the Teachers-Students relationship among undergraduates in University of Ilorin. Overcrowded lecture rooms strain the teachers-students relationship by reducing personal interaction, increasing educator stress and leaving students feeling isolated. The slow learner can not be carried along because the teacher can not identify him/her. Tight sitting arrangements often block teacher from moving around the hall to check on students progress. This result is in accordance with the submission of Adedeji, (2020), which affirmed that when classrooms are overcrowded, the teacher's ability to engage with each student diminishes, which can lead to disparities in learning. Students who may need additional help, particularly those who struggle with certain concepts, are more likely to be overlooked in such an environment. When students are mentally exhausted, they are less likely to retain information and more likely to become disengaged from class discussions and assignments. Over time, this contributes to a decline in academic performance and overall achievement.

Conclusion

Based on the findings of the study, the following conclusions were drawn:

In the view of the data collected and analysed, the researcher concluded that overcrowded lecture rooms have significant implications on the level of assimilation, level of concentration, and cause poor teachers-students relationship have significant implications among undergraduates at the University of Ilorin. Overcrowded lecture halls lower academic performance due to low rate of assimilation, low level of concentration and poor teachers-students relationship.

In summary,

1. Poor assimilation is a significant implication of overcrowded lecture rooms on the academic experiences of undergraduates at the University of Ilorin.
2. Lack of concentration is a significant implication of overcrowded lecture rooms on the academic experiences of undergraduates at the University of Ilorin.
3. Poor teacher-student relationship is a significant implication of overcrowded lecture rooms on the academic experiences of undergraduates at the University of Ilorin.

Recommendations

Based on the findings, the following recommendation were drawn:

- The University of Ilorin should reduce class sizes by increasing the number of lecture rooms or scheduling additional sessions for large classes.
- The university administration should invest in improving lecture room infrastructure, such as installing better ventilation systems, soundproofing, and ergonomic seating arrangements. These improvements can minimize distractions and create a more focused learning environment, helping students maintain concentration and reducing mental strain.

- The university should implement stress management programs, such as counseling services, mindfulness workshops, and peer support groups, specifically targeting students affected by overcrowded learning environments.
- The University of Ilorin should encourage more interactive teaching methods, such as small group discussions or office hours, to foster better teacher-student relationships despite large class sizes.

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