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Factors Affecting Design Studio Culture Of Architecture Students In Selected Universities In Oyo State, Nigeria

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ABSTRACT
Studio culture plays a significant role in the educational journey of architecture students. This study aimed to understand the effects of factors affecting studio culture in schools of architecture in Nigeria. The study adopted a mixed method approach, by using quantitative data to provide a holistic understanding of the research problem and qualitative data through the use of interviews to understand how the factors influence or affect studio culture. The study sampled 100 students across four schools of Architecture. The results showed that the factors influencing studio culture are space adequacy, studio mentor, lighting, ventilation, noise levels, electricity supply, and Availability of Electric Wall sockets. The influence of the factors on studio culture were lack of enthusiasm, fatigue, eye strain and body aches and Body aches, poor creativity, and lack of collaboration.
Keywords: Studio, Culture, Architecture students, education

INTRODUCTION

Studio culture plays a significant role in the educational journey of architecture students. It refers to the set of shared values, attitudes, practices, and social dynamics within an architecture design community. These include the interactions among students, faculty members, administrative bodies, and external organizations. A vibrant studio culture fosters an environment conducive to creative thinking, collaboration, and academic development, thus promoting continuous feedback, constructive critique, and social engagement (Akinlolu & Adedokun, 2021).
Architecture design studios are the heart of architectural education. They provide students with a creative space to transform abstract concepts into tangible designs. Within these studios, students explore new ideas, engage in intellectual debates, and receive guidance on how to refine their design approaches. As described by Akinlolu et al. (2022), an effective studio culture in architecture is essential for encouraging innovation, enhancing students' problem-solving abilities, and improving overall design outcomes.
The studio culture within an architectural department can significantly influence these design outcomes. As such, understanding the factors affecting studio culture is essential to improve both the learning environment and the overall design process. This study aim to understand the effects of factors affecting studio culture in architecture studio. It identified the factors affecting studio culture. Furthermore, it examined the identified factors to understand how they affect studio culture.

LITERATURE REVIEW

Defining a culture is never an easy task, more so to define the culture of a design studio make out of individualistic and dynamic mind (Abdullah et al., 2011). In studies of architecture, it has been observed that, the design studio is largely perceived as an essential component of architectural design education in other to develop creative outcomes (Casakin & Davidovitch, 2013). In learning environment such as a studio, students work in togetherness with teachers and other classmates. Architectural Education has been proven not to be complete without due reference to its studio culture (Aderonmu et al., 2018). The said culture has been observed to consist of a set of reoccurring patterns, habits and experiences expressed by students in their design studio. Studio culture is one of the basic subject in design education. Studio culture primarily came into architectural education in late 1990s at schools of architecture of United States of America (Hacihasanoglu, 2019). Architectural education was largely based on apprenticeship models and its nature has not varied much during long period but the Source of changes was its appraisal process and system (Badiossadat et al., 2011). In design studios, a key learning format to teach design in architectural education, entails students develop certain ways of doing things when occupying its space with learning activities and interactions that which is referred to as studio culture (Abualflayeh, 2021). It has been opined in recent times that student studio culture has experienced changes that are significant, and that contemporary design students usually spend less time in studio than their predecessors (Bussiere et al., 2014). Studio culture has endured to be both a rich and intensive medium of teaching and learning, giving credence to the widely perceived wisdom that studios are ‘a good thing’, and is also a productive and rewarding subject of research (Vowles et al., 2012a).

(Casakin & Davidovitch, 2013) study examined social-academic climate as observed by design students in spaces of learning such as the design studio and in the architectural courses. The study found that, the studio is an environment that breeds high completion amongst students, however, it does not necessarily translate an absence of supportive relations or conflicts among students. (Aderonmu et al., 2018) opined that, components of design studio culture affects students’ performance. These components are, encouragement, Environment of the design studio, constraint and sacrifice. Research shows that each school of architecture define its studio culture policy according to its own corporate culture. However, there is a common similarity in the criteria defined by accreditation body (Hacihasanoglu, 2019).

Studies has that, factors such as, privacy, collaborative spaces, and layout has been found to influence studio culture of architecture students (Bussiere et al., 2014). Socioacademic climate influenced by factors such as competence, innovation, and teacher’s support were found to have influenced students’ studio culture (Casakin & Davidovitch, 2013). (Wong, 2023) in the study identified factors such as Physiological Facilities, Information and Communications Technology, Indoor Environment Quality, Territoriality, and Furniture, as factors influencing studio culture for architecture students. Furthermore, the ranking of 16 attributes, as revealed showed High-Speed WiFi as the most important, followed by Air Conditioning, Private Workspace, Lighting, Power Socket, Furniture, Pantry, High Spec Computer, Ventilation, Group Work Area, Sleeping Area, Cabinet, Leisure Area, Plotter, Mini Library, and Pot Plant. Research on student motivation shows that some of the traditional practices of architectural education largely leave students unmotivated and need to be reconsidered (Pilat & Person, 2022). (Atef et al., 2025) in the study identified factors such as stressors, including excessive workloads, perfectionist expectations, and blurred boundaries between academic and personal life as contributors to causing burnouts in architecture students. Circulation has been found to be one of the important psychological comfort requirement that designer should consider for the comfortability of students to reach their tables. Also, a minimum of two entrances should be provided for larger studios for better accessibility (Hesham Omar, 2022). Another approach to improving studio culture is fostering greater collaboration between students and faculty members. By creating more opportunities for informal interaction and mentorship, students can receive ongoing guidance and support, leading to better design outcomes (Akinlolu et al., 2022). Additionally, creating a physical studio environment that supports creativity, relaxation and integrates wellness and flexible designs. Providing access to design tools, comfortable seating, and quiet spaces for individual work can enhance the studio culture and improve students' academic performance (Mottafeh, 2024).

METHODOLOGY

The research adopts a mixed method approach, by using quantitative data to provide a holistic understanding of the research problem and qualitative data through the use of interviews to understand how the factors influence or affect studio culture. This design allows for an in-depth exploration of the nuances of the factors that affect studio culture in selected universities in south west Nigeria. It explored the ways in which it affects students design processes and outcomes. The study shows surveys that gather quantitative data on students' perceptions and experiences with the studio environment, and perspectives related to factors that affect studio culture and design outcomes. The study surveyed architecture students from four schools of architecture in Oyo state. The schools are Ajayi Crowther University, Leadcity University, Ladoke Akintola University of Technology, and University of Ibadan.

S/N	SELECTED UNIVERSITIES	SAMPLE FRAME	SAMPLE SIZE
1	Ajayi Crowther University, Oyo	81	9
2	Leadcity University, Ibadan	350	36
3	University of Ibadan	175	18
4	Ladoke Akintola University of Tech	359	37
	Total	**965**	**100**

The sampling method for this study is designed to ensure a representative and unbiased selection of architecture students in the selected universities, focusing on their perceptions of various studio cultures ranging from environmental to social, psychological, institutional and technological. Sampling techniques like stratified random sampling is used and this technique divides the population into strata based on academic levels (e.g., undergraduate and postgraduate) or socioeconomic backgrounds.

RESULTS

Social Characteristics of Respondents

The result showed that, 62.3% of respondents were males and 37.7% of respondents were females. This shows that, the schools of architecture sampled had more male students than female students. It may reflect wider enrollment patterns or gendered perceptions of the discipline. Gender-specific needs should be considered in studio design and scheduling. The age distribution showed that 56.5% of respondents were ages 21-25, 1.6% above 25, and 41.9% were between ages 16-20 years. Age may influence design maturity and time management. Programs should cater to diverse cognitive and emotional development stages. As regard the year of study, result showed that, 42.2% of respondents are in 400l, 30% in 300l, 14.4% in 200l, and 13.4% are in 100l. This shows a gradual decline in the levels however, feedbacks from 400l students might provide a more matured insights into long term studio experiences. Their views are critical for evaluating studio reforms.

Factors affecting Studio Culture

The result showed that factors affecting studio culture are, Space Adequacy, Quality of Equipment, Lighting, Ventilation, Studio Mentor, Noise Levels, Electricity Supply, and Availability of Electric Wall sockets. 25% of respondents opined that the available spaces were not enough. There were cases of studios having more than the required number of students, 10% identified the quality of the teaching skills of the studio mentors, 15% identified the availability of quality of equipment’s as affecting studio culture, 8 % identified poor lighting as a factor influencing studio culture. 7% referred to poor ventilation as stimulating studio culture, 10 % identified noise levels around studio as a factor, 15% identified electricity supply and 10% identified inadequate electric wall sockets as factors influencing studio culture.

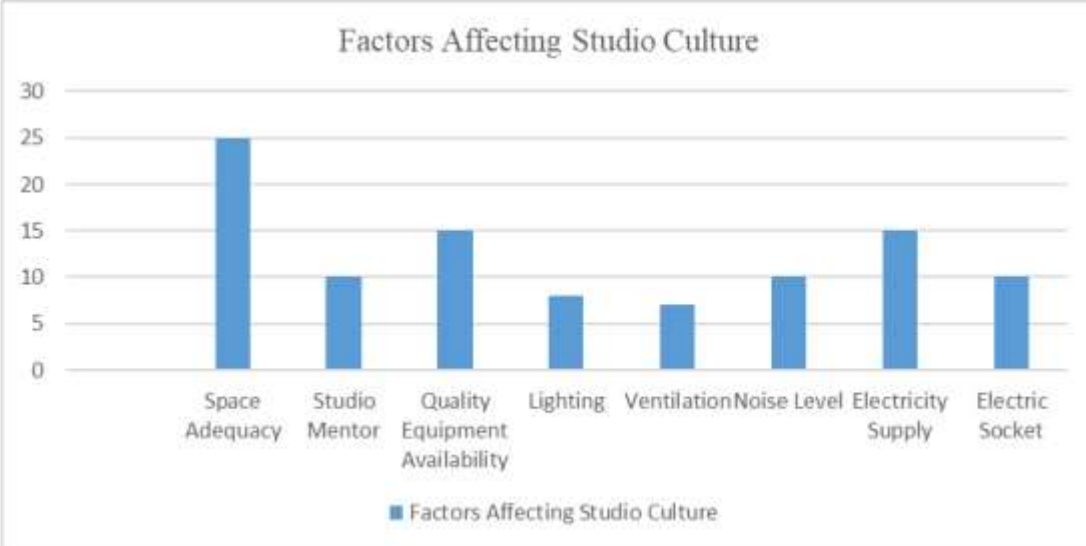

Fig 1: Showing Factors Affecting Studio Culture
Source: Researchers Field work 2025

Students Perception on the Factors affecting Studio Culture

Space Adequacy

47.5% of respondents reported that studio spaces were inadequate, 10.8% opted for very inadequate, 26.2% were neutral 15.5% reported that the spaces were adequate. This indicated that respondents perceived studio spaces to be inadequate. Inadequate workspace can hinder creativity, focus, and productivity. It may also reduce willingness to spend extended hours. More spacious and equitable studio layouts are essential for effective design education.

Equipment Quality

37.9% of respondent rated studio equipment as good, 29.3% found it poor, while 32.8% reported that the quality of available facilities were average. This mixed perception reflects unequal access or outdated tools. Reliable and modern equipment is essential for skill development. This shows that most percentage perceived the quality of studio equipment as average.

Fig 2: Showing Equipment Quality
Source: Researchers Field work 2025

Ventilation

The result showed that, 57.7% reported inadequate ventilation, with 22.8% saying it was rarely sufficient. 10.2% were neutral and 9.3% opined that it was adequate. Poor ventilation quality can impair comfort and cognitive performance. These are essential for long design sessions. Studio design must improve in environmental ergonomics.

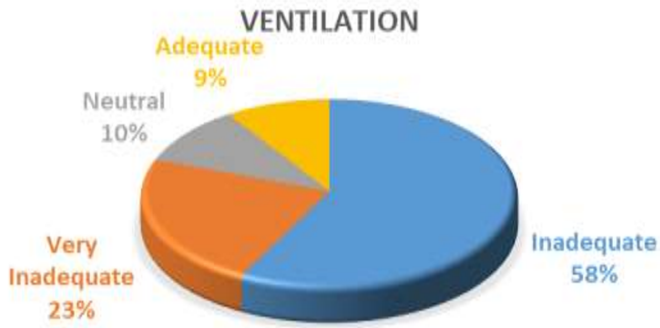

Fig 3: Ventilation
Source: Researchers Field work 2025

Lighting

Results shows that 75.3% of respondents perceived lighting to be adequate in most studios during day time. 15.7% were neutral in their perception of lighting. 5.6% opined that it was inadequate, while 4.4% identified lighting as inadequate. Lighting supports student's ability to work during the daytime in the studio. Improved lighting will enhance students stay in design studios.

Electric Socket

93.7% of respondents opined that availability of electric socket or lighting point will influence their desire to work in the studio, while 6.3% reported that it won't influence their desire to stay in the studio. Availability of electric socket spaces for students to work in the studio will enhance their desire to stay longer in the studio. Students' perception showed that 95.6% of respondents were not satisfied with electricity supply in their studios. Electricity supply was considered a key factor influencing students' studio culture.

Noise Levels

34.5% of respondents reported that are satisfied with noise levels within the studio, 30.6% were neutral in their response, 20.5% reported that they were not satisfied, while 14.4% reported that they were not satisfied with noise levels around their studio. Noise levels has a way of affecting students' concentration in the studio. It can distract or reduce their concentration levels.

Studio Mentor

Results showed that 75.8% of respondent reported that studio mentor influences there studio culture, 24.2% reported that they were indifferent about studio mentors influencing studio culture. A studio mentor not only shape, but also influences the desire of students to stay in the studio.

Quality Equipment

32.9% of respondent reported feeling neutral with the quality of available equipment, 60.4 percent were dissatisfied with quality of available equipment, 6.7% reported that they were satisfied with the quality of available equipment. Good equipment enhances students desire to stay in the studio. Poor quality equipment will discourage students stay in the studio.

Effects of factors on Studio Culture

Result showed that studio culture were shaped of influenced by the factors in the following ways: Lack of Enthusiasm, Fatigue, Eye strain and Body Aches and Body aches, poor creativity, and lack of collaboration.

Lack of Enthusiasm

Interview with students indicated that, factors such as studio mentor, space adequacy, poor lighting and ventilation, and high noise levels were factors debilitating against students interest in shaping their studio culture. A male 400L level student opined that, '*I would have been more enthusiastic in coming to studio but I am rarely inspired by the studio mentor*'. This showed the students lack of interest in coming to the studio as a result of the influence of the studio mentor (Aderonmu et al., 2018). Another female 300L student expressed that, '*I don't like fighting with my fellow students for drawing tables. I prefer it when I have mine. It's always easier when you have a space you can call your own*'. Space inadequacy was identified being a factor making students loos interest or enthusiasm about the studio. A 200L student complained that, 'the noise levels around her studio is highly distracting, 'I *can rarely focus when dramatic arts students which is a department close to my studio are rehearsing. I really don't feel like coming to the studio on such days*'. Noise levels around the studio is seen to be a factor negatively affecting student enthusiasm.

Fatigue

Results shows that poor quality of equipment or studio furniture are contributors to fatigue in students (Vowles et al., 2012b). A 300L female students opined that 'I usually feel extremely tired after working in the studio. '*I literally had to carry a hand fan fanning myself while in the studio. The heat is much, and that could be tiring*'. It could be deduced from the students' submission that fatigue was an outflow influencing the student's perception towards studio culture. Another 200L male student said that, '*as much as I like working in the studio, the stress of having to stand when not having a space to sit could be tiring*'. The report of the above 200L student showed that tiredness was a challenge as a result of space adequacy. Many other students interviewed used words like *'weakness, exhaustion, and being drained'* as a result of standing to take lectures in the studio. '*If the was adequate, I wouldn't need to stand and be exhausted after taking lecture'*. This was opined by a 400L male student.

Eye Strain and Body Aches

Students reported having eye strain and body pain as result of their activities in the studio. A 400L female student complained that '*my drawing table is too low. I can't spend more than 45 minutes drawing before I start experiencing back aches*'. Another 400L male student expressed that '*it is usually strenuous drawing in the studio anytime above 6pm. When the daylight is out, we have to strain our eyes because of lack of power supply to light the bulbs in the studio*'. '*I don't find it funny when I have to strain my eyes to see what's on the board',* this was reported by a 200L male student. The above was seen to have discouraged students from embracing studio culture. A conducive studio atmosphere will be a great contributory factor to encouraging students to stay in their respective studios (Bush, 1979).

Poor Creativity

Students reported experiencing creativity blocks while in the studio. A 400L male students opined that, '*studio is not the best of places to get inspiration*'. A conducive and inspiring atmosphere will naturally be a great contributor to creativity. Students excel more in an atmosphere that inspires their minds. Another 100L student expressed that '*though am still new in the department, I don't think I like staying long in the studio. If the studio were more beautiful or packed with drawings, the story might be different'*. Reports like this shows how these experiences shape the studio culture of student. A beautiful studio will definitely inspire the creativity in students (Casakin & Davidovitch, 2013).

Lack of Collaboration

Naturally, the studio should be a place where students collaborate to work and inspire one another (Bussiere et al., 2014). However, when the space is inadequate this goal can experience a setback. A 300L female student opined that, 'I really don't like bringing my work to studio due to lack of space. If the space was big enough, me and my friends would have loved more to work together'. A 400L student submitted that, '*I usually have to go to a friend's house where I and 2 other colleagues work so we could brain storm together. If the studio had enough furniture, we all would have worked there'*. It could be seen that, collaboration was not encouraged in studio spaces due to inadequate furniture. Adequacy of space and furniture will foster collaboration within a studio space (Pilat & Person, 2022).

DISCUSSION

Results from the research that factors affecting studio culture are space adequacy, studio mentor, lighting, ventilation, noise levels, electricity socket and supply. However, space adequacy seems to be the most prominent challenge influencing studio culture (Berdi, 2015). Schools of Architecture should invest more in providing adequate spaces and number of furniture within studio spaces. This will encourage students to embrace the culture of coming to the studio and staying longer in the studio (Alhusban et al., 2024). Ventilation also play a key role in influencing studio culture. A well ventilated studio space will enhance enthusiasm and drive students' interest in using the studio (Reem, 2022). Thermal comfort is a key factor in students enjoying their stay within the studio. Lighting was also shown to be crucial in enhancing students stay in the studio. Good lighting will reduce eye strain and improve studio experience for students (Chidima, 2024). Studio mentors have also shown to be contributors to shaping studio experience of students. A good studio mentor will inspire students' interest in the studio (Özener & Meterelliyöz, 2020). Studio mentors are encouraged to improve their teaching skills so as to elicit students' interest in coming to the studio. Availability of quality furniture was shown to be critical to students' use of the studio (Amoian, 2012). Furniture not comfortable discourages students from using the studio (Allahdadi et al., 2018). Hence, schools of architecture should adopt the use of purpose fit furniture in their studios. Finally, availability of electric sockets and supply was seen as critical to student use of the studio. It is easier for students to work within the studio when there is an easy access to electricity for them (Mcintyre, 2008).

CONCLUSION

The study aimed at understanding the effects of factors affecting studio culture in schools of architecture in Nigeria. Result showed that the factors are space adequacy, studio mentor, lighting, ventilation, noise levels, electricity socket and supply. The study showed that the factors influenced studio culture in the following ways: Lack of Enthusiasm, Fatigue, Eye strain and Body Aches and Body aches, poor creativity, and lack of collaboration. Designers and sector players in schools of architecture can take interest if focusing on the identified factors so as to avail students of Architecture a pleasurable learning experience while in the studio. This will not only make studio worthwhile, but also enhance the drive for improved studio culture amongst architectural students.

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