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Users' perception on accessibility provisions in selected art centres in Lagos State Nigeria

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Abstract. This study examines the perception of accessibility provisions in selected art centres in Lagos, Nigeria. The research investigated how architecture influences the people and their development, enabling or hindering them across many facets which influences economic growth. The concept of accessibility significantly affects a society's interaction with its architecture and infrastructure. With a focus on accessibility, this study investigated the perception of users towards accessibility provisions in selected art centres alongside with how these provisions affect usability of these centres. A quantitative methodology of research was carried out via the distribution of questionnaires to workers and users of three selected art centres in Lagos state, Nigeria. Data collected was analysed using SPSS 21 and interpreted accordingly. The findings suggested that not all necessary access provisions are available and of the available ones, very few were effective. Inadequate accessibility leads to less utilisation of these facilities, which is having a negative effect on the users of the investigated facilities. The study concludes that in order to promote poverty alleviation, and the creation and sale of art, accessibility provisions need to be present and appropriate for all users to access the necessary facilities. It was recommended that, fully functional art centres are attainable by integrating accessibility from the onset of design.

Key words: Accessibility, Art centre, Disability, Lagos State and Users' Perception.

1. Introduction

Art plays a pivotal role in a society's contribution towards social, economic and cultural well-being. It has long been a means towards liberation and poverty alleviation; being the free expression of original thought and ideas communicated visually, or by performance. It is the manifestation of creativity without constraints of a problem that needs to be solved. Art in urban communities, is practiced, produced, presented and preserved in modern art centres. According to Evans, [1] Art centers are buildings or complexes situated in a community for the purpose of providing facilities for the practice of art activities. In the recent decades, the art centre has become the home base for the contributions of art in any society. Art centres provide spaces for visual and performing art activity and education. It affords people to make a bold statement about the culture of the hosting community and often stand iconic in the city's landscape. Spaces for recreation, leisure, art, performance exhibition among others are provided. In order to contribute towards poverty alleviation, art practice could be a means for Nigerians whose cultural backgrounds are tied to the practice of creativity. The access to consume or produce art is crucial for economy development.

Over time, the physical and built environment have been designed and developed around the ideal image of the average human being. This may vary slightly from society to society, but universally favours the upright individual who lives without motor or sensory impairment or any other physiological hindrance to movement. The built environment should leave out considerations for Persons living with disabilities.



The concept of accessibility according to ableist ideals came about as a result of the condition of disability; individual's functional limitations and its effect on the daily lives of those living with it in relation to their environments [2]. In this context, accessibility refers to the unhindered journey between the immediate surroundings of the building and its surroundings. Accessibility involves the provision of an unobstructed route from the access roads and the car park through the public spaces of the building. It extends from the entry points to the spaces within the building where users, including individuals with disabilities who would carry out required activities and functions [3]. Accessible design is the understanding of the differences in physiological and neurological ability among different individuals and the consideration of those needs in the design of indoor and outdoor spaces. The ability of a product, facility and services to accommodate people with a wide range of abilities can be referred to as Accessibility, [4].

Urban environments have very often stood as a hindrance to the inclusion and participation of disabled people in economic and social development in cities and communities. This is because consideration for the diversity of physical ability has not been adequately addressed. This is especially so in developing cities around the world including the city of Lagos, in Nigeria. This lack of adequate consideration, has resulted in the hindrance or outright exclusion, and difficulty of persons with disabilities to integrate their lives into their society's; driving them into poverty and stripping them of their independence.

How the physical environment of a public area like an exhibition space is designed, affects the experience of the user. Considering this, such spaces should be designed and built to satisfy the users in terms of recreation, tourism, and learning with maximum ease. [5] Studies show that there are many benefits in the adoption of a universal design approach in planning and building public art and cultural spaces some of which include the provision of a better learning experience for the disabled, an increase visits and user interactions with the facility. The challenge of inaccessibility, can hinder the progress of any society as a fraction of available human resources cannot make any contributions since their movements are greatly restricted. This defeats government plans to empower the community of physically challenged persons. This also means more will need to be spent on technology aided measures where accessibility has not been considered in the initial building designs than would have been spent if measures had been included in original architectural designs of these facilities.

It is noted that disabled people have potential for competence and talent in other facets of human endeavours however, the physical environment can positively or negatively influence the realization of their goals [6]. It is imperative to integrate people with disabilities into society so that they can play active roles in the society, [7]. In Nigeria, there are little to no effective measures being taken towards ensuring accessibility in public buildings. Disabled citizens have no choice in most cases, than to forfeit activities they may need to participate in. However, lack of adequate accessibility means, creativity will not take place to its full capacity at the micro level. This will have an accumulated macro effect on the growth of the creative industry which in turn affects economic, social and cultural outcomes, as both disabled artists and consumers cannot access spaces to create or purchase goods.

Taking accessibility measures means more people can use a building and use it conveniently, it also means the traffic that comes with public buildings can also experience easier flow in, out, and around the building. These measures of accessibility, would also provide a basis on which policies can be designed and selected around disabled and special needs persons. Numerous documents have outlined the guidelines for access provisions in public buildings. The application of those guidelines is to take place in the design of the buildings. The components for accessibility discussed in these documents include but are not limited to the following: lifts, doors, pathways, stairs, ramps, signage etc. [8].

Design Strategies towards an accessible design, would include: Provisions for handicap parking close to the entrance of a building, wide enough for a specialized car to fit in; Wide pedestrian pathways, and curb ramps where a transition onto the road is required; Wheel chair access via wide doors of at least 1.2m; Ramps for vertical transport which do not exceed 1:12 in slope, and have rest areas for every 9m flight; Larger lifts with wider doors that can accommodate wheelchair users; Restroom stalls for the handicap with all necessary support and floor space for independent movement; Multimedia signage so that people with different impairments can find their way around any facility via the medium they understand; Stairs provided for those who may use them should be well lit areas, they should also be well marked and have support rails fitted along their path. Lastly, floor surface finishes. Choices for floor finishes, should not be slippery, they should be stable and sturdy, [9]. Hence, the aim of this study is to investigate the users' perception of effectiveness of accessibility provisions in select art centers in Lagos, Nigeria.

2. Methodology

The study area for this research work was Lagos state, Nigeria. Choice of the sample area was made due to the presence of a budding creative industry. Lagos state is a developing urban city with a projected handicap population of about 3 million [9]. The art centres in the sample frame are part of a total of eleven (11) art centres in Lagos State. The study frame was selected using a stratified-random probability sampling method. The three art centres studied were selected on the basis of size and type. The procedure for participant selection in data collection via questionnaire is by a simple random probability sampling procedure. The art centres studied were selected on the basis of size, functions and type. Data was collected with the use of questionnaire to investigate the users' perception of the need for universal design accessibility provisions in these homes. The data collected was then analysed and presented using SPSS (Statistical Package for the Social Sciences) analysis.

The questionnaire was divided into two sections. The first section consisted the respondents' bio data including sex, age, disability status, disability type and the user relationship with the art centre. The second section had questions on the availability of specific access provisions, use frequency of these provisions and user perception of the effectiveness of these accessibility provisions in the arts Centres. The questionnaires were distributed in the following art centres:

- i. National Theatre, Iganmu, Lagos State.
- ii. Terra Kulture, Victoria Island, Lagos State.
- iii. Nike Art Gallery, Lekki, Lagos State.

The Table 1 below shows the number of users in the selected art centres. The population consisted of 311 users, including workers and customers.

Table 1 number of users in selected art centres in Lagos state.

Art Centers	Customers At Peak Period	Number Of Workers	Total
National Theatre	60	40	100
Terrakulture	150	13	163
Nike Art Gallery	40	8	48
Total			311

In Table 2 below, it can be said that of a study population of 311 users, a total of 65 users can be adopted as a sample representative of the population with ninety-five per cent (95%) confidence level and seven (7) confidence interval of as indicated from results using survey systems- Online resource calculator.

Table 2: Determination of sample size from a population of 311

Population	Statistical Formulae	Sample size	Confidence Level/ Interval
311	<i>Survey Systems</i> ^a $SS = Z^2(P)(1-P)/C^2$; $SS^* = SS/1 + (SS - 1)/n$	120	95% / 7

^a Online resource calculator

3. Data Analysis

In this section data gathered from administered questionnaires was analysed and interpreted question by question.

3.1. Respondents biodata

In this first section of the questionnaire. The biodata of respondents were gathered in six questions. Which requested for respondent age groups, gender, and state of ability. Beyond the respondents' biodata, the relationships of respondents with the art centre and how often they engaged with it was enquired. The results are presented in the tables below.

Table 3 and 4 show gender percentages of respondents and age group percentages of respondents, respectively.

Table 3. Gender percentages of respondents

Gender	Frequency	Percent
Male	62	55.4
Female	50	44.6
Total	112	100.0

The table shows that 55.4% of the respondents were male and 44.6% of respondents were female. The age range of the respondents are shown in Table 4 below.

Table 4. Age group percentages of respondents

Age Group	Frequency	Percent
20 years and below	2	1.7
21-30	104	92.8
31-40	4	3.5
41-50	1	0.8
51 and above	1	0.8
Total	112	100.0

The Table 4 above shows that of the 4 age groups presented in the questionnaire, 92.8% of respondents are between the ages of 21 and 30, 3.5% of respondents are between the ages of 31 and 40, while 1.7% of respondents were in the age ranges of 20 years and below. 41 to 50 years, and 51 years and above were each made up of 0.8% of respondents. Table 5 below displays the results showing percentage of respondents with disabilities.

Table 5 Table showing percentage of respondents with disabilities

Respondents with Disabilities	Frequency	Percent
Yes	14	12.5
No	98	87.5
Total	112	100.0

12.5% of respondents answered yes to the question, while 87.5% answered no. Respondents who answered yes to the above question 3 were asked to specify what disability they had. Tables 6 and 7 show the percentage of respondents with specific types of disabilities and percentage of respondents who are staff or visitors, respectively.

Table 6 Table showing percentage of respondents with specific types of disabilities.

Types Of Disabilities	Frequency	Percent
Visual Impairment	13	92.9
Mobility Impairment	1	7.1
Total	14	100.0

Of the 14 respondents who answered yes to question 3, indicating that they had a disability, 92.9% of them state they are visually impaired, while 7% of them state they are mobility impaired.

Table 7 Table showing percentage of respondents who are staff or visitors

User Type	Frequency	Percent
Staff	12	10.7
Visitor	100	89.3
Total	112	100.0

In the table above, the relationship of the respondents to the art centre 10.7% of respondents were members of staff at the selected art centres while 89.3% of respondents were visiting. Question six measured how often respondents engaged with the facility. Data is presented in Table 8 below, with options ranging from “a few times a week” to “once a year/ First time user”.

Table 8 Table showing how frequency of visits to art centres by the respondents.

Frequency Of Visit	Frequency	Percent
A Few Times A Week	8	7.4
Once Weekly	2	1.9
Once A Month	2	1.9
Bi Monthly	18	16.7
More Than Twice A Year	28	25.9
Once A Year/ First Time	50	46.3
Total	108	100.0

The data presented in the table shows that most respondents visit art centres once a year at 46.3%. 25.9% of respondents visit art centre more than twice a year. 16.7% make bi monthly visits. 1.9% of respondents visit once a week and once a month each. While 7.4% of respondents indicated that they visit a few times a week.

3.2. Accessibility Provisions

The second part of the questionnaire investigates accessibility provisions in the art centres and their use and efficiency. This information was retrieved in three questions in this section of the questionnaire.

Question 7 sought to find out which of the necessary components of accessibility were present in the art centres. A multiple response frequency table presents the responses in the Table 9. It shows that wide

doors are the most provided access provision in art centres with an occurrence of 25.6%, followed by ramps at 20.5%. The least available provisions for accessibility are shown to be Handicap parking and tactile steps, which both occur at 4.3%.

Table 9. Table showing access provisions available at art centres

Access Provisions	Frequencies	Frequency	Percent
Lifts		14	5.5%
Ramps		52	20.5%
Wide Doors		65	25.6%
Signage		33	13.0%
Handicap Parking		11	4.3%
Handicap Restroom		2	0.8%
Curb Ramp		36	14.2%
Tactile Steps		11	4.3%
Non-Slip Floors		30	11.8%
Total		254	100.0%

Figure 1 displays the results of frequency of use for the access provisions. Wide doors were shown to be the most used access provision. While ramps were shown to be the most rarely used access provision.

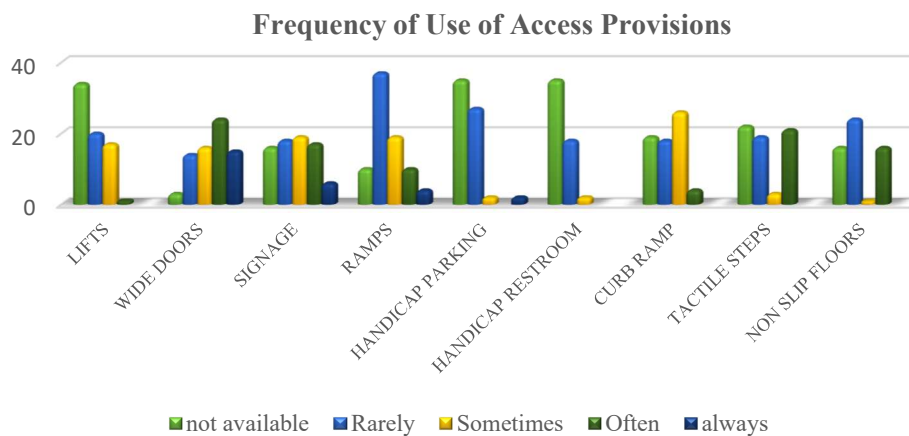


Figure 1. Frequency of Use of Access Provisions

The final question asked respondents how effective they found each of the access provisions available in their art centres. Their results are illustrated in the chart below. It is shown that ramps were the most

effective accessibility provision, followed by wide doors then signage. Figure 2 displays the results of effectiveness of access provisions

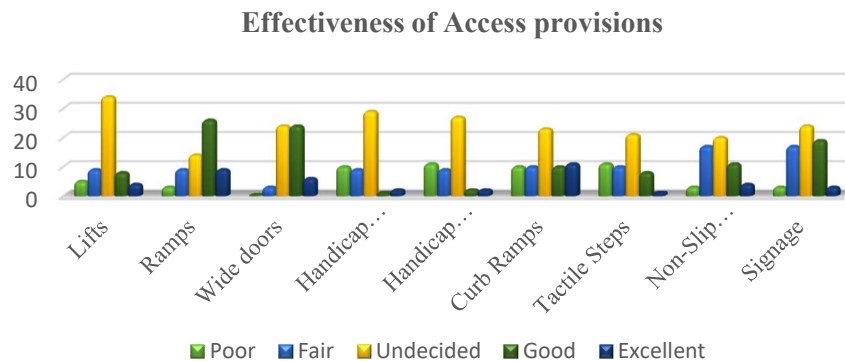


Figure 2. Effectiveness of Access provisions

4. Conclusion & recommendations

From the above analysed results of the questionnaires, it was deduced that, access provisions in art centres in Lagos are generally inadequate. Only a small percentage of the population that visit art centres have some type of disability. Of the listed types of disabilities, disabled users are mostly visually impaired. The most adequate and effective access provisions in the art centres are wide doors and ramps, this suggests that not all disability types were put into consideration in providing accessibility components, and not all building functions were considered in making provisions for access. Only general circulation within the facilities might have been considered.

Overall, in relation to the objective of this study, with the low levels of use indicated and low ratings issued in research findings concerning necessary access provisions in art centres, it can be seen that users perceive available access provisions in art centres in Lagos to be not effective enough in serving their use. This means that what is available does not meet their needs which can be directly related to the frequency of use of these provisions. Showing that parts of the buildings where these inadequate components of accessibility may lead to are not being utilised enough. Considering that majority of the handicapped users were visually impaired, it is recommended the spaces of these art centres be designed or arranged in a manner that minimizes hazards and errors. Audio or conspicuous visual warnings of hazards and errors must be provided, and fail safe features and signs that discourage unconscious action in tasks that demand vigilance must be provided also. Information and guidance from accessibility provisions should be presented in multiple formats that are able to engage other senses and abilities of the impaired users, and reinforce communication. Supplementing access provisions with audio aid and tactile markings will keep visually impaired users aware of their surroundings.

Generally, accessibility provisions should be incorporated from the outset of a buildings design, so that proper consideration is taken and a more sustainable building design is developed that can allow more people frequently make use of its facilities. It is also necessary that all access needs should be considered, not just a select few. Access provisions should also be provided according to highest standards, outlined by the American Disability Act, including accessibility provisions such as wide pathways and doorways, ramps and curb ramps, elevators, or automated systems like doors with card-swipe for access control both within and outside public buildings, will ease the mobility of disabled users around public facilities and allow them to meet information needs [11].

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