REGULATION OF LIBRARY NOISE POLICY FOR EFFECTIVE NOISE CONTROL

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ABSTRACT

The aim of this study is to ensure general guidelines for regulation of library noise policies are implemented in the appropriate areas of the library in order to create an educational environment conducive enough for study and research. The study discovered that noise affects the mind and changes the emotions and behaviour of humans in many ways. The library requires quietness, so sound should be controlled whenever noise may adversely affect the working conditions, comfort, or health of library users. A conclusion was made that noise is an unwanted sound considered unpleasant, loud, or disruptive to hearing, and as such, it's highly prohibited inside the library. The library is considered a noise-free reading area to enable concentration on tasks in the library. This is a good and necessary factor for adequate reading, learning, or research, and it cannot be delayed. It is almost impossible for any reader to either read or do proper research without a good regulation of library policy to help maintain a calm, serene, safe, and readable environment. One of the recommendations was that at the initial, the library should be located in a serene environment where there's no urban noise, where the construction and demolition industry are not located too close to the library

KEYWORDS: Library, Noise Regulation/Policy, and Effective Control.

Introduction

The physical environment and condition of a library are essentially as important as the resources that a library can count upon as either sources of strength or sources of weakness. Certain factors, namely: ventilation, noise, and the physical facilities of a library, such as library furniture and lighting, are variables that are likely to influence the use of

the library. Effective noise control in libraries should be regulated at all times. Saka, Aremu, and Adedeji (2012) admonish libraries to carry out periodic environmental surveys in order to ensure that there is always good and effective noise control around the reading areas. Nick (2008) also believes that just as vision is important to learning through reaching, so too is a wholesome non-auditory environment, which is required for concentrated reading and study. To be able to concentrate on tasks in the library such as reading and writing, there is a need for the control of noise, as it is generally agreed that noise and other distractions to learning in libraries pose a threat to learning.

Regulation of library noise policies within areas of the library is one standard measure to create an educational environment conducive for study and research. This is also a good factor necessary for adequate reading, learning, or research to take place in any library. Functional libraries must be guided by procedures, regulations, and policies. It is also important to be watchful of the mode of operations of the library patrons while they spend their time searching for information. This effort will facilitate the library patron's understanding of their studies (Edward and Fisher 2002; Rmnathan 2007). It is almost impossible for any reader to either read or do proper research without a good regulation of library policy to help maintain a calm, serene, safe, and readable environment.

An ideal learning environment can be described as one that has all the learning enabling factors, such as adequate regulation policies to achieve noise-free reading areas. Nwalo (2007) found out that environmental factors such as lighting, ventilation, reading space, convenience, and most especially effectiveness, play a role. Most libraries in Nigeria do not properly regulate noise policies like overcrowding and poorly ventilated areas. This encourages noise pollution.

Concept of Noise

Noise is an unwanted sound considered unpleasant, loud, or disruptive to hearing. From the physical point of view, noise is undistinguished from desired sound, as both are vibrations through a medium such as air or water. The difference arises when the brain receives and perceives a sound. Noise comes in all shapes, sizes, and sounds. It is part of our everyday lives. Before you proceed to the actual definition of "noise," it is important to understand the distinction between noise and sound. Noise is a type of sound and is defined as unwanted, annoying, unpleasant, or loud. Our ears are excellent at telling us what the noise is. Most commonly, noise is an annoying tone that causes mild to major discomfort or irritation. These tones pierce through the background noise that accompanies our lives.

Types of Noise

Noise can be categorized into following types:

Continuous Noise: is a noise that is continuously produced, for example, the machinery that keeps running without interruption. Those could come from equipment, engine noise, or the heating and ventilation system.

Environmental Noise: This is otherwise called "intermittent noise." It is the accumulation of noise present in a specified environment. Intermittent noise is a noise level that increases and decreases rapidly. The principal sources of environmental noise are surface motor vehicles, aircraft, trains, and industrial sources (Storey, 2018).

Urban Noise: This is also called "impulsive noise." It is generally not of an intensity that causes hearing loss, but it interrupts sleep, disturbs communication and interferes with other human activities. It is also associated with the construction and demolition industries. These sudden bursts of noise can startle you with their fast and surprising nature. This kind of noise is commonly created by explosions or construction equipment, e.g., pile drivers.

Low-frequency Noise: This is also called acoustic noise. It is any sound in the acoustic domain, made deliberately by music or speech or unintended. Since audio engineering defines noise as the unwanted residual electric signal that gives rise to discomfort, It is heard as a hiss. This signal noise is commonly measured using A-weighting (Pierre & Maguire, 2004) or ITU-R 468 weighing (International Telecommunication Union, 2016). These fluctuations of data that hinder perception of a signal can be reduced using a sound metre with third octave band analysis. Low-frequency noise is mostly observed in libraries.

Effect of Noise on People

Noise affects the mind and changes emotions and behaviour in many ways. It interferes with our communication and arouses our sense of fear. It is overly arousing and presents a high level of stimulation. As a result, too much arousal causes a person to be uncomfortable. As a result, he will tend to make more mistakes (Thpman and Miler, 1974). The effects of noise on people in the library are categorised into:

(a) **Health Effect:** A health effect is not merely the absence of disease and infirmity. "Health is a state of complete physical, mental, and social wellbeing. Hardly a day passes without being subjected to irritation, and to what degree depends on many factors, some of which are in the presence of noise in the libraries. Health is compromised by interference with peace of mind, privacy, work or pleasure (White and Walker, 1982). The noise sources expose millions of people to noise pollution that creates

not only annoyance, but also significant health consequences such as an elevated incidence of hearing loss, cardiovascular disease, and many others.

(b) **Performance Effect:** It is likely that any new sound or challenge to an existing sound may result in at least momentary distractions, and this may impair a person's ability to perform some task. Reading in the library is most prone to disturbances since it has a small margin for error and requires interactions with more than one source or sensing channel.

Typically, the impairment in the libraries in the presence of noise takes the form of signal being missed, increased error in respond and assimilation and this can lead to assimilation time.

Concept of Library

Sometimes it takes a lot of time and effort to understand which direction to go with your work. It would be ever-so-useful to have a library of different concepts at hand anytime you needed it. The word "library" seems to be used everywhere, from the brick and mortar public library to the digital library. The library helps you find the best source of information, whether it's a book, website, or database entry.

A library is a collection of resources in a variety of formats that are organised by information professionals or other experts. It provides convenient physical, digital, and bibliographic services and programmes with the mission of educating, informing, or entertaining a variety of audiences and the goal of stimulating and advancing society as a whole (ALA, 2010).

The Online Dictionary of Library and Information Science (ODLIS): Library from the Latin word "Liber" meaning "book". In Greek and the Roman Language, the corresponding term is "bibliotheca". It is also seen as a collection or groups of non-print materials organized and maintained for use in diverse ways of reading.

A library is a place where books and other sources of information are stored. They make it easier for people to get access to them for various purposes. Libraries are very helpful and economical too. They include books, magazines, newspapers, DVS, manuscripts, and more. It is a place set aside to contain books, periodicals, manuscripts, publications, and other materials for reading, viewing, listening, studying, or referencing as a room or sets of rooms or buildings where books may be read or borrowed.

Other than seeing a library as a building where books are seen physically, it can also contain some electronic material (e-library). Online activities are a growing part of many people's lives, both engaging in interactive

and social events on the web and increasingly becoming active partners in creating new contexts. The Web is the unifying term for this kind of new technology that enables users to interact with and patronise web sites. Examples include social networking, blogging, and wikis. There is a wide range of literature concerned with exploring the techniques. (Miller, 2005, O'Reilly, 2005, Maness, 2006, Miller 2006) and there are also a number of examples of how the techniques have been implemented in library contexts. The library is seen as a growing area of interactive and social tools on the web with which to create and share dynamic content (Connor, 2007).

There is a clear need to establish a well-regulated policy for effective noise control in libraries since the library is seen as an arena of possibility, opening both a window into the soul and a door into the world.

Types of Libraries

Libraries may be categorised into the following institutional libraries: public libraries, national libraries, special libraries, government libraries, monastic libraries, new-library, proto-library, e-library, and subscription libraries (ALA, 2010). The library requires quietness, so sound should be controlled whenever noise may adversely affect the working conditions, comfort, or health of library users. And these can be managed through proper regulation of library policy that governs the activities of the library.

Library Noise Policy

In order to maintain a safe and welcoming environment for teaching, learning and other library activities, the Nigerian libraries (the library) require all visitors to comply with the policies, rules, and regulations. Visitors or library patrons must also comply with all the policies enriched into the law by the government.

Ordinances and Policies

In order to maintain a safe and welcoming environment for teaching, learning, and other library activities, the Nigerian libraries (the library) require all visitors to comply with the policies, rules, and regulations. Visitors or library patrons must also comply with all the policies enriched into the law by the government. Certain geographical areas or occupations may be more vulnerable to constant high levels of noise; regulation may have negative health consequences (Bhatia, 2014). Noise regulations include statutes, procedures, or guidelines relating to school transmission established by national, state, or provincial and municipal levels of government. These policies include:

In the United States of America

(a) Noise Control Act: In 1972, the Noise Control Act was passed in a U.S.A to promote a healthy living environment for all Americans and to set a standard where noise does not pose a threat to human health. This policy's main objectives were to;

- Establish coordination of research in the area of noise control

- Establish federal standards on noise emission for commercial products and

- Promote public awareness about noise emission and reaction

(b) The Quiet Communities Act of 1978: This act promotes noise control programmes at the state and local level and developed a research program on noise control.

(c) Installation of NIOH Act (Revised in 1972) The National Institute for Occupational safety and Health (NIOH) was set up. The body provides recommendation on noise exposure in the workplace. In 1972 (revised 1998). NIOH published a document outing recommended standards relating to the occupational exposure to noise, with the purpose of reducing the risk of developing permanent hearing loss related to exposure to work (GDE NIOSH publications and products 1975).

In Europe

The European Environment Agency regulates noise control and surveillance with the European Union (European Environmental Agency 2016). Environmental Noise Directives was set to determine levels of noise exposure, increase public access to information regarding noise.

Effective Noise Control: Effective noise control or noise mitigation is a set of strategies to reduce the impact of noise, whether outdoors or indoors. An effective model or approaches for noise control is the source, path and receiver model by Bolt and Ingard (Haris, 1957). Hazardous noise can be controlled by reducing the noise output and its source, minimizing the noise as it travels along a path to the listeners and providing equipment to the listener or receiver to attenuate the noise.

A variety of measures aim to reduce hazardous noise and it source. Programmes such as Buy Quiet and the National Institute for Occupational Safety and Health (NIOSH) prevention through design promote research and design of quiet equipment and renovation and replacement of older hazardous equipment with modern technologies. This is properly achieved through effective regulation of libraries policies. This will help to achieve

an environment conducive enough for study as well as wellbeing library patrons.

Library Noise and Effective Noise Control

The library's noise policy is set up and, with effective regulation, is aimed at providing an environment that is conducive to study in the library as well as welcoming to all library patrons. All library users must respect the rights of others and refrain from making excessive noise while using the library.

There is a variety of mitigation strategies and controls available to reduce Sound Levels including source intensity reduction, and these includes

1. *Quiet Zone*: There are designated quiet zone in the library. No noise or cell phone conversations are permitted in quiet zones. Face to face conversation should be conducted using moderate tones.

2. *Cell Phones*: Place all cell phones should be put on vibration or turn off or better still in silent mode when entering the library. All phone conversations are to take place outside the main library area. Library patrons should be directed to the area between the front doors of the back hallowing to use their phones.

3. With a valid student's ID, headphones may be borrowed for checks out for in-library use at the circulation desk. Also ear buds are available. Headphones should be used at all times when operating any kind of media where audio is necessary.

4. Study rooms and class room doors should be closed when in use. Since the rooms are not sound proof, reasonable quiet voices are encouraged. Good noise barriers and sound baffles equipments should be fixed.

5. Disorderly conducts, destruction of property, abusive, inappropriate unprofessional language or actions towards library staff or other library patrons will not be given and patrons will be asked to leave the building immediately. (If deemed necessary, will be called to handle the campus security issue).

6. *Electronic Devices*: Library users may only listen to audio devices e.g library computers, IPod, MP3 players, DVDs, CDs, using headphones (headsets). This will help to reduce the audibility and make the vicinity quiet enough for library users.

7. *Architectural Acustics*: Designs such as architectural acustic design is a measure in the science and engineering in order to achieve a good sound within a building by building acustics.

8. All noise complaints are handled by library staff in a timely, fair and equitable manner.

There are many other strategies that will help in the effective control of noise in the library for effective educational environment if conducive study and research are conducted.

Conclusion

Noise is an unwanted sound considered unpleasant, loud, or disruptive to hearing, and as such, it's highly prohibited inside the library. The library is considered a noise-free reading area to enable concentration on tasks in the library. This is a good and necessary factor for adequate reading, learning, or research, and it cannot be delayed. It is almost impossible for any reader to either read or do proper research without a good regulation of library policy to help maintain a calm, serene, safe, and readable environment.

Recommendations

1. It is recommended that, initially, the library should be located in a serene environment where there's no urban noise, where the construction and demolition industry are not located too close to the library.

2. Phone usage regulations should be effectively prioritized while the usage of library computers, e.g., IPods, MP3 players, DVDs, and CDs, should be operated using headphones (headsets) as this will help to reduce the audibility and make the vicinity quiet enough for library users.

REFERENCES

American Library Association (2010). *Definition of a Library*: General Definition. ALA Chicago. Retrieved from: https://libguides.ala.org/library-definition

Bhatia, R. (2014). *Noise Pollution*: Managing the Challenge of Urban Sounds. Earth Journalism Network.

Connor, E. (2007). Medical librarian 2.0. *Medical Reference Services Quarterly*, (26)1, 1-15.

Edward A. N. & Fisher C. N. (2002). Study behavior techniques and learning environment of undergraduates in the university: A case study of University of Benin. *Emotan Journal of fine and Applied Arts*, 1(1), 189-202.

International Telecommunication Union (2016). *Recommendation ITU-R BS.468-4 – Measurement of audio-frequency noise voltage*. International Telecommunication Union. www.itu.int.

Maness, J. M. (2006). Library 2.0 theory: Web 2.0 and its implications for libraries. *Webology*, (3)2, 18-25.

Miller, P. (2005). Web 2.0: Building the new library. *Ariadne*, Vol. 45. Available at http://www.ariadne.ac.uk/issue45/miller/.

Miller, P. (2006). Coming together around Library 2.0: a focus for discussion and a call to arms. *D-Lib Magazine*, 12(4).

Nick, G. I. (2008). Assessment of physical facilities and readers satisfaction in Kashim Ibrahim Library, Ahmadu Bello University, Zaria. *Library Focus*, (15 &16), 1-11.

Nwalo, K. I N. (2007). Measures of library effectiveness in Nigerian polytechnic libraries with emphasis on user satisfaction. *Journal of Librarianship Information Science in Africa*, 1(1), 41-50.

Pierre, R. L. S. and Maguire, D. J. (2004). *The Impact of A-weighting Sound Pressure Level Measurements during the Evaluation of Noise Exposure*. The 2004 National Conference on Noise Control Engineering. Baltimore Maryland, United States

Rmnathan (2007). *Air quality inside your house- don't take it for granted*. HubPages, Maven Media Brands, LLC.

Saka, H. T. Aremu, A. S. and Adedeji, A. A. (2012). Assessing the Noise Pressure Level in Libraries' Study Rooms in Nigeria – A Tropical

Region. *Epistemics in Science, Engineering and Technology*, 2(4), 139-151.

Storey, C. (2018). *What are the 4 Different Types of Noise*? NoiseNews Blog.

Thpman, A. and Miler, R. K. (2006). *Secrets of noise control*. Fairmount Press, Atlanta.

White, R. G. and Walker, J. G. (2004). *Noise and vibration*. Chichester Ellis Horwood, New York.