

STUDENTS' UNDERSTANDING OF LIBRARY SIGNAGES: A GROUNDED THEORY STUDY AT FEDERAL COLLEGE OF EDUCATION IN NIGERIA

¹MUHAMMAD MUSA HAYATU PhD and ²SHEHU TALATU

¹Department of Library and Information Science, Ahmadu Bello University, Zaria, Kaduna State, Nigeria

²Federal College of Education, Zaria, Kaduna State, Nigeria

Abstract

This grounded theory study explored students' understanding of library signages at the Federal College of Education, Zaria. Using qualitative data collection and analysis based on students' experiences and perspectives, the study aimed to generate an understanding of this issue and provide practical insights for enhancing signage effectiveness. The research employed a grounded theory approach to identify emergent themes, elucidate patterns, and construct a theoretical framework that sheds light on the complexities of library signage knowledge among students in Nigerian educational context. The study purposively sampled 30 students for the study, however, saturation occurred after the 10th interview. The study found that the understanding of students on the available library signages in Federal College of Education, Zaria Library includes: i) Wayfinding tools ii) Signs on the door and iii) No knowledge. It was then recommended that the management of the Library should implement educational programmes or orientation sessions for new students to familiarize them with the Library layout and signage system. This could include guided tours, instructional videos, or informational materials highlighting the importance and meaning of different signs. The study concluded that the lack of understanding of library signages could potentially affect the overall user experience of students accessing library resources.

Keywords: Library signages, Understanding, Navigation, Grounded theory, Wayfinding, Federal College of Education, Nigeria

Introduction

Library anxiety is the fear and apprehension attached to not finding what a library user is looking for in the library and the fear attached to the library personnel to ask for help. This anxiety interferes with the information seeking process because those who experience it avoid using the library to source for information. This consequently reduces library patronage. Studies of (Bishop & Bartlett, 2013; Mandel, 2013) have shown that majority of the questions library users ask are way-finding and navigational in nature. Human in nature have traditionally preferred the use of spatial information in form of signs and maps to find their way (Mandel, 2013). In the library setting, these way-finding tools are library signages. They instruct, inform, and direct users on library policies, emergencies, and the location of

information resources and services. Despite the availability of these way-finding tools in academic libraries, library patronage is reducing at an alarming rate especially in the Federal College of Education, Zaria Library.

In order to increase patronage of the library by users, there is the compelling need to explore the knowledge of library users on library signages and their knowledge of the information the signages convey. This is critical because library signages help alleviate the wayfinding and navigational issues that otherwise heighten library anxiety and consequently reduces library patronage. They make the library use experience a pleasurable one and the library becomes user friendly. More so, the ability for library users to find their way in libraries has an impact on their ability to successfully use library facilities to fulfil their own information needs.

Equally critical is their knowledge of these signages. Knowledge is the combination of awareness and understanding that individuals use in taking decisions and actions. This is such that when decisions and actions are not effective, it is inferred that knowledge was not applied. In information science discipline, scholars have equated the utilization of information as a process that originates from the point of giving meaning to experiences (Dervin, 1993; Weick, Sutcliffe & Obstfeld, 2005). This implies that for individuals to utilize any information for decision making, they must first have the knowledge of the information. Suffice it to say therefore, that for students to patronize the library and reduce the anxiety occasioned by navigational/wayfinding issues, they must first have the knowledge of library signages and the information they convey. This study will therefore explore the understanding of Students of Federal College of Education, Zaria on Library Signages in the library through the Inductive Grounded Theory Approach.

Inductive Grounded Theory Approach entails the generation of new knowledge/substantive theories/ conceptual frameworks as a product of enquiry into the experiences, views and opinions of a group of individuals. This new knowledge illuminates the understanding of the particular phenomenon that is being studied in the situational context of the study (Park, Bahrudin & Han, 2020). The inductive Grounded theory approach does not accommodate any hypothesis, theoretical or conceptual framework at the start of the enquiry, the approach leads to the evolution and generation of a theory, model or framework from the continuous interplay between data analysis and data collection. This is to avoid “forcing the data” or attempting to fit data into a preconceived theory (Charmaz, 2014).

Statement of the Problem

Academic libraries have the objective of satisfying the informational needs of their users by providing the right information resources and services. These information resources and services in turn have to be arranged and classified on shelves in the library in a manner that makes their discovery by users easy. This makes user experience of the library

environment pleasant. Consequently, users patronize the libraries whenever the need information.

However, academic libraries nowadays experience low patronage by users especially students (Obi, 2023; Hamad, Al-Fadel & Fakhouri, 2023). One of the causes of this low use of information resources and services is library anxiety. The size of the library, complexity, unfamiliar tools and technology has the potential of heightening this anxiety for library users. In many cases, this anxiety is caused by navigational and wayfinding issues related to locating information resources and services in the library (Nieves-Whitmore, 2021; Su, Lu, Sun & Liu, 2022). To remedy these navigational and wayfinding issues in the library, library signages are placed in strategic places in the library.

Despite the availability of these library signages, library patronage is reducing at an alarming rate especially in the Federal College of Education, Zaria Library. In order to improve patronage of the library by users, there is the compelling need to explore the understanding of the information the signages convey. This is critical because information is utilized only when it makes sense to the user. This study therefore explored the understanding of students as it relates to library signages in Federal College of Education Zaria, library.

Objectives of the Study

The objective of this study is to explore the understanding of the information the signages convey by students of Federal College of Education, Zaria.

Literature Review

Library signage is one of the most important means of promoting use of the library, and user satisfaction with the library. Library Signages is a collective term for all the static visual symbols and devices posted in a library to direct patrons to specific resources, services, and facilities and to inform them of library hours, policies, programs, and events, including their size, design, and placement. The relationship between library usage and the effectiveness of library signage systems has been examined through various studies, shedding light on different aspects of this dynamic.

Kasa, Yani, and Gani (2016) focused on the state of libraries within Ahmadu Bello University, emphasizing the importance of signage in enhancing the library environment and ensuring uniformity of purpose. They highlighted challenges such as defaced or outdated signs, suggesting the need for consistent maintenance and allocation of responsibilities for signage design and upkeep. By aligning with universal design principles, they aimed to improve the effectiveness of signage systems.

Su, Lu, Sun, and Liu (2021) on the other hand, delved into patrons' wayfinding behavior in university libraries, emphasizing the impact of signage design on navigation. Through eye movement tracking, they revealed how different types of signage influenced users' fixation and search behavior. Their findings underscored the importance of

informational signage in aiding navigation, with variations in attention based on patrons' wayfinding strategies and levels of spatial anxiety.

Usuka, Nwachukwu and Nwachukwu (2019) explored the influence of library aesthetics, including signage, on patronage in federal university libraries in South East Nigeria. Their study revealed that aesthetically pleasing libraries, including well-designed signage, positively influenced users' perception and utilization of library services for educational purposes.

Emmanuel (2020) investigated the relationship between library signage and students' utilization of information services in UK university libraries. Their findings emphasized the predictive role of information guides in enhancing students' utilization of library services, highlighting the significance of effective signage in facilitating access to resources.

Thompson and Monokpo (2020) examined the impact of library signage on students' utilization of information services specifically in the University of Calabar library. Their study demonstrated that instructional and regulatory signage significantly predicted students' utilization of library services, reinforcing the importance of coordinated signage systems in university libraries.

Onwuchekwa (2020) expanded on the multifaceted roles of signage in libraries, advocating for the integration of digital signage to enhance communication with patrons. By leveraging digital platforms, libraries can convey diverse information ranging from event announcements to emergency messages, thus enriching the user experience and promoting a green environment.

Overall, these studies collectively highlighted the role of effective signage systems in libraries, not only for wayfinding but also for enhancing the overall user experience, promoting resource utilization, and fostering a conducive learning environment.

Methodology

The study adopted a qualitative research methodology and grounded theory design. Grounded Theory is defined as “an overall approach to inquiry with the primary purpose of generating theories that explain the interactions and/or settings of interest” (Marshall & Rossman, 2016). Inductive thematic analysis was employed for data analysis. In line with the qualitative research methodology, the saturation point was arrived at after the 10th interview even as the study estimated a sample of 30 students as postulated by Gentles et al (2015), who recommended 25-50 interviews for single case studies. Saturation point is the point where no new information is gotten from interviews. At this point all participants are saying the same thing.

Purposive (Criterion-based) sampling technique was adopted in this study. This involves selecting participants that have met some predetermined criteria (such as the

inclusion criteria given below) that are important to the research problem, (Gentles et al, 2015; Patton, 2015).

Inclusion criteria are those characteristics of the participants that justifies and qualifies including them in the study. The following criteria was used to select participants for this study: the following are the inclusion criteria for participants of this study:

- Must be a registered user of the library
- Must have spent a session as a student of the College
- Must have used the library even on just one occasion
- Be willing to share information with the researcher

The study adopted semi-structured interview. This instrument was adopted for this study because this study explored the knowledge of students on Library signages in an academic library.

Results

Understanding of students on the available Library signages in Federal College of Education, Zaria Library

The study explored the understanding of students on the available library signages in Federal College of Education, Zaria library. Three categories emerged from the narratives of participants of this study namely: i) Wayfinding tools ii) Signs on the door and iii) No knowledge.

Understanding of students on the available Library signages in Federal College of Education, Zaria Library

Research Questions	Themes	Subthemes
What is the understanding of students on the available library signages in the Federal College of Education, Zaria Library?	1. Wayfinding tools	1.1 They guide us on how to use the library
		1.2 Used to locate and find books
		1.3 Direct you
	2. Signs on the doors	2.1 The signs are the ones on the doors
	3. No Knowledge	3.1 I don't know anything about the signages

Wayfinding Tools

This category emerged from narratives of participants related to the knowledge of students on the available library signages in Federal College of Education Zaria library. It is made up of three subcategories that manifested from narratives of participants, namely: i)

They guide us on how to use the library ii) Used to locate and find books and iii) directs you. These subcategories are explained below:

They guide us on how to use the library: This subcategory emerged from narratives related to the knowledge of students on the available library signages in Federal College of Education Zaria Library. A participants showcased his knowledge of signages by describing them as a guide on how to use the library.

“They guide us on how to use the library...” Participant 1.

Used to locate and find books: This subcategory also emerged from narratives related to the knowledge of students on the available library signages in Federal College of Education Zaria Library. Participants knowledge of library signages also revolves around signages being used to locate and find books.

“...used to locate and find my books...” Participant 4.

Similarly, Participant 5 recounted that *“They help me to locate the section where I can find the books for my department”*.

Directs you: This subcategory also depicts the knowledge of participants on the available library signages in Federal College of Education Zaria Library. Participants reported that signages directs users of the library to the different sections of the library. Participant 4 narrated that *“...directs you and shows you that this section contains books...”*. Similarly, Participants 9 and 10 expressed their knowledge of signages as:

“Signs in the library are the ones of the doors that direct”. Participant 9.

“Signs direct me to section where books of my department are located”. Participant 10.

Signs on the door

This category sums up narrative related to knowledge of students on the available library signages in the Federal College of Education, Zaria library as signs on the door. It is made up of one subcategory namely: The signs are the ones on the door. This subcategory is explained below.

The signs are the ones on the door: This subcategory emerged as a knowledge of students on the available signages in the Federal College of Education Zaria library. Participants of this study see signages as the signs on the doors that direct users to the different sections of the library.

“The signs are the ones on the doors to the different sections of the library” Participant 6.

“The signs I know are the tags on every door in the library” Participant 8.

No Knowledge

This category also emerged from narratives of participants related to knowledge of students on the available signages in the Federal College of Education Zaria library. It is made up of one subcategory. The subcategory shows some students do not have the

knowledge of signages as they do not see the need for them as they bring their reading materials to the library. Participant 2 narrated that *“I don’t know anything about the signages. I come to the library with my own materials”*.

Discussion

The understanding of students on the available library signages in Federal College of Education, Zaria Library includes i) Wayfinding tools ii) Signs on the door and iii) No knowledge.

In this study setting, participants see signages as signs that direct them to sections of the library where information resources for their departments are located. Some of the participants see signages as the signs on the doors in the library that shows the section on the library. While a participant said she has no knowledge of signages as she comes to the library with her own reading materials.

Wayfinding tools include maps, signs, guides and pamphlets that are used to locate information resources and services in a library. These tools have now become the focus of the next generation of information systems that offer self-services in the library. They are designed in such a way that a library user can navigate information resources and services without any help from librarians. Library signages have been captured in Library and Information science literature as wayfinding tools (Mandel & Johnston, 2019; Mandel, 2020; Rakshikar & Powdwal, 2021; Su, Lu, Sun & Liu, 2022). The studies however made the point that these signages should be in the forms of maps, signs, guides and pamphlets. These tools should form a wayfinding information system for the library. In this study setting however participants just see signages as signs on top of the doors in the library.

Wayfinding is a challenging task in libraries as users navigate the complex environment of the library in search of information resources and services, particularly when combined with a person’s unfamiliarity with the specific environment (Rakshikar & Powdwal, 2021). It involves the navigation and the final location of information resources and services by library users. Wayfinding in libraries requires the user to rely on information from their surroundings to acquire the knowledge necessary to locate their destination (Iftikhar, Asghar & Luximon, 2021). This knowledge concerning how to navigate the library and destination can be obtained from signages if students have the knowledge of the content of these signages. Library signage informs library users and influences their behaviour. A library user that finds the library user friendly in terms of the ease of locating information resources and services cultivates the habit of using the library to satisfy his/her information needs and this consequently alleviates the fear of using the library. Library signages as wayfinding tools ultimately direct library users to information resources and services. Mandel and Johnston (2019) opined that it is therefore critical for libraries to do everything they can to provide an effective wayfinding information system since “poor judgment of wayfinding in the setting affects the way the organization itself is perceived”.

Conclusion

It could be concluded that the understanding of library signages is an important issue that influences library patronage. Navigational/wayfinding challenges and the approachability of library personnel are some of the sources of library anxiety among students of Federal College of Education, Zaria. These are the major causes of low patronage in the library. The understanding among students regarding library signages indicates that some students are aware of the available wayfinding tools and signs on doors, while others have no knowledge of them. The lack of understanding of library signages could potentially affect the overall user experience of students accessing library resources.

Recommendations

Based on the findings of this study, the following recommendations were made to improve the situation:

1. Educational Programmes: The Library Management should implement educational programmes or orientation sessions for new students to familiarize them with the Library layout and signage system. This could include guided tours, instructional videos, or informational materials that highlight the importance and meaning of different signs.
2. Standardized and Digital Signage: The Library Management should consider using standardized symbols, colours, and fonts for consistency and clarity. Implementing digital signage or interactive maps within the Library premises, especially in high-traffic areas or near entrances, can provide real-time information and assist users in navigating the space effectively.
3. Strategic Signage Placement: Evaluate the placement of signage throughout the Library to ensure they are located in strategic areas and at key decision points to assist users in wayfinding. Conduct walkthroughs to identify areas where signage is lacking or insufficient and make necessary adjustments.

References

- Bishop, B. W., & Bartlett, J. A. (2013). Where do we go from here?: Informing academic library staffing through reference transaction analysis. *College & Research Libraries*, 74(5), 489.
- Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). Los Angeles: SAGE.
- Dervin, B. (1993). Verbing communication: Mandate for disciplinary invention. *Journal of communication*, 43(3), 45-54.
- Emmanuel, R. P. (2020). Availability of Informational Guide and Students' Utilisation of Information Services in University Libraries in the United Kingdom. *GASPRO International Journal of Eminent Scholars*. Vol. 6(3), 52-61.

- Gentles, S. J., Charles, C., Ploeg, J., & McKibbin, K. (2015). Sampling in Qualitative Research: Insights from an Overview of the Methods Literature. *The Qualitative Report*, 20(11), 1772-1789. Retrieved from <http://nsuworks.nova.edu/tqr/vol20/iss11/5>
- Hamad, F., Al-Fadel, M., & Fakhouri, H. (2023). The provision of smart service at academic libraries and associated challenges. *Journal of Librarianship and Information Science*, 55(4), 960-971.
- Iftikhar, H., Asghar, S., & Luximon, Y. (2021). A cross-cultural investigation of design and visual preference of signage information from Hong Kong and Pakistan. *The Journal of Navigation*, 74(2), 360-378.
- Kasa, M. G., Yani, D. S., & Gani, E. (2016, APRIL). Achieving access to information resources through the use of signage systems in libraries. In *Proceedings of the Nigerian Library Association Conference*.
- Mandel, L. H. (2013). Finding their way: How public library users wayfind. *Library & Information Science Research*, 35(4), 264-271.
- Mandel, L. H., & Johnston, M. P. (2019). Evaluating library signage: A systematic method for conducting a library signage inventory. *Journal of Librarianship and Information Science*, 51(1), 150-161.
- Mandel, L. H. (2020). Comparing Different Methodologies Used in Wayfinding Research in Library Facilities. *Qualitative and Quantitative Methods in Libraries*, 9(2), 173-190.
- Marshall, C., & Rossman, G. B. (2011). *Designing qualitative research* (5th ed.). Thousand Oaks, CA: Sage.
- Nieves-Whitmore, K. (2021). The relationship between academic library design and library anxiety in students. *portal: Libraries and the Academy*, 21(3), 485-510.
- Obi, H. E. (2023). Library Marketing Indicators on Students' Patronage of Information Services in Federal Universities in South-South Nigeria. *International Journal of Library and Information Science Studies*, 9(1), 1-11.
- Onwuchekwa, E. O. (2020). Library Signage and Information Graphics: A Communication Tool for Library Users. In Tella, A. (Eds.), *Handbook of Research on Digital Devices for Inclusivity and Engagement in Libraries* (pp. 231-237). IGI Global.
- Park, D., Bahrudin, F. I., and Han, J. (2020). Circular Reasoning for the evolution of Research through a Strategic Construction of Research Methodologies. *International Journal of Quantitative and Qualitative Research Methods*, 8(3), 1-23.
- Rakshikar, N., & Powdwal, S. (2021). Wayfinding in libraries: a study of university library users in Mumbai. In *ICAL 2020* (pp. 91-129). Academic Publications.

- Su, W., Lu, Z., Sun, Y., & Liu, G. (2022). Let eyes tell: experimental research on university library signage system and users' wayfinding behavior. *Library Hi Tech*, 40(1), 198-221.
- Thompson, G. L., & Monokpo, B. B. (2020). Instructional Guide and Regulatory Signage as Predictors of Student's Utilization of Information Service in University of Calabar Library. *International Journal of Research in Education and Management Science* 3(2), 1-11.
- Usuka, E. I., Nwachukwu, V. N., & Nwachukwu, P. (2019). Availability of library aesthetics for enhanced educational purpose of library patronage by users in federal university libraries in south east Nigeria. *Library Philosophy and Practice*, 1-11.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization science*, 16(4), 409-421.