

## **EXPLORING THE KNOWLEDGE OF STUDENTS ON USE OF LIBRARY SIGNAGES IN FEDERAL UNIVERSITIES OF EDUCATION**

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### **ABSTRACT**

This study explored the knowledge of students on Library Signages in Federal University of Education Zaria library. To achieve the aim of the study, four research questions were raised. A qualitative research methodology was adopted. An inductive grounded theory research design was employed in the study. Out of the projected 25 participants of the study, 10 interviews were used for the analysis of the study as saturation was achieved after the 10<sup>th</sup> interview. The study found two types of library signages are available in the Federal University of Education. library namely: i) Directional and ii) Informational Signages. Also, the study revealed that the knowledge of students on the available library signages in Federal University of Education Zaria library includes i) Wayfinding tools ii) Signs on the door and iii) No knowledge. The study recommended that the library management could explore the integration of digital signage solutions or mobile applications to provide real-time updates on library services, resources, and events. Leverage technology to enhance the visibility and accessibility of library signages.

### **INTRODUCTION**

Library anxiety is a feeling of fear brought on by library use or the consideration of visiting a library. Users who experience library anxiety feel intimidated, and uneasy when faced with using a library, often resulting in the reduction in library patronage and in some extreme cases library avoidance. Library anxiety has been described as "an uncomfortable feeling or emotional disposition that is experienced when students are utilizing the library or contemplating its use" (Jiao & Onwuegbuzie, 1999). According to Tewell (2014), "It is also the state where people are unable or unwilling to use a library due to feelings of helplessness or discomfort". This anxiety interferes with the information seeking process because those who experience it avoid using the library to source information. Studies of library anxiety have generally equated it to all the negative feelings of helplessness, fear, inferiority complex that together makes the library use unpleasant (Mellon, 1986; Bowers, 2010; Abusin, Zainab & Abdulkarim, 2011; Lawless, 2011), these studies are generic in their focus on sources of library anxiety. However, most of these feelings of helplessness that is attributed to library anxiety are the inability of users to locate information resources in the libraries and the fear attached to seeking help from library personnel. Majority of the questions that library users have are navigational, directional and wayfinding issues (Bishop & Bartlett, 2013). It is to this end that libraries introduced the use of Library signage.

Library signage instructs users, reduces anxiety, mitigates negative experiences, and maximizes the user-friendliness of the environment (Mandel & Johnston, 2019). It helps users find their way in the libraries and locate information resources and services on information retrieval tools like the card catalogues, and online public access catalogues. They also provide emergency information, point-of-use instructions and they generally inform users about library policies, resources, services and events. Signage provides the guide to wayfinding. Wayfinding in libraries is the way users orient themselves and navigate the library space (Mandel, 2017). Wayfinding can be facilitated through the provision of spatial information that guides people in orienting and navigating a space. In libraries, this spatial information is Library signage. Despite the availability of library signage however, low patronage of libraries is still a cause for alarm in academic libraries especially in developing countries (Nse & Okorafor, 2011; Ogbuiyi & Okpe, 2013; Omotosho & Okiki, 2015; Saibakumo, Orewa, & Nwose, 2019).

In order to increase library patronage and reduce library anxiety in academic libraries, there is the need to explore the knowledge of library signage by students. This is critical because the knowledge of library signage by students will make the library user-friendly and this will make the library experience of the student interesting. The knowledge of students on library signage will also provide audit for the library as to how effective the signages are in directing students to information resources and services.

### **Types of Library Signage**

Library Signages are designed to identify, inform, direct, restrict or permit access to information resources and services of libraries. The types of these signages are categorized based on the functions that they perform (Ahn, 2011).

- a. Directional Signages: Signages in this category inform users of the location of information resources and services in the library. This category of signages is the solution to wayfinding/navigational issues that user encounter when using the library.
- b. Emergency Signages: Signages in this category draw the attention of users to potentially harmful areas, objects and situations. They also inform users on the actions to take in cases of emergency.
- c. Instructional/Regulation Signages: These signages instructs library users on library policies. They tell the users what they can do/not do in any particular area of the library. They also tell the users the expected behaviour for each area in the library.
- d. Locational/Positional Signages: Signages in this category direct users to the location of information resources and services in the library. They also inform the users the names of different units, divisions and sections of the library.
- e. Informational Signages: contains necessary information for library users to use appropriate data, tools and facilities of library. The signage includes administrators' intentions, general information, restrictions, opening hours, titles of facilities and exhibitions, handling descriptions and operational manuals.
- f. Bookshelf Signage: This category is basically technical in nature. They inform users of the call number of shelves where information resources are located. This signage constitutes signs, front label or phrases on the shelves in the library.

### **Statement of the problem**

Academic libraries support the three cardinal objectives of their parent institutions. They facilitate teaching, learning and research by providing information resources and services in formats that best suits the information needs of the user community. However, academic libraries today lament the low patronage of their resources and services (Saibakumo, Orewa, & Nwose, 2019). 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 translates to non-use of the information resources and services of academic libraries by user community (Borteye, Atiso & Afia, 2018).

Library anxiety is basically the fear and apprehension attached to not finding what a library user is looking for. 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 however, library patronage is reducing at an alarming rate especially in the Federal University of Education, Zaria Library.

In order to improve patronage of the library by users, there is the compelling need to explore the knowledge of library users on Library signages and their understanding 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. This study will therefore explore the knowledge of Students of Federal University of Education, Zaria on Library Signages in the library through the Inductive Grounded Theory Approach.

### **Research Question**

This research provided answer to the following research question:

What types of library signages are available in the Federal University of Education, Zaria Library?

What challenges do students face in the use of Federal University of Education, Zaria Library?

### **Scope of the study**

This study is a qualitative case study was conducted in Federal University of Education, Zaria. The study focused on the library signages that are available in the Federal University of Education, Zaria Library. It specifically explored the knowledge of students as it pertains to library signages.

## **REVIEW OF RELATED LITERATURE**

### **Wayfinding in Academic Libraries**

Wayfinding is a critical element in patrons being able to access and use library resources and services. There is little point in having a resource or service if locating it is a tiresome and frustrating experience for patrons. In this section, literature on wayfinding behaviours and strategies are presented.

Beecher (2004) explored the process of wayfinding as it applies to locating information in a public library. A group of volunteers were asked to find a selection of items in three types of libraries—traditional, contemporary, and modern. The retrieval process was timed and the reactions of the volunteers were recorded, documented, and analyzed. The impact of various wayfinding tools—architecture, layout, color, signage, computer support, collection organization—on the retrieval process was also identified. The study revealed that many of the wayfinding tools currently available in libraries do not facilitate item retrieval. Inconsistencies, ambiguities, obstructions, disparities, and operational deficiencies all contributed to end-user frustration and retrieval failure. The study suggests that failing to address these issues may prompt library patrons—end users who are increasingly interested in finding information with minimal expenditures of time and effort—may turn to other information-retrieval strategies and abandon a system that they find confusing and frustrating.

Li and Klippel (2012) explored wayfinding problems in relation to the environment and to individual characteristics of patrons, such as their familiarity and sense of direction. The study employed formal spatial descriptions of the environment addressing visibility, layout complexity, and connectivity. The results show that a building's layout complexity and visual access potentially predicts how well patrons find their goals (books and other materials). Other aspects such as signs or individual characteristics of patrons were also found to play a role in understanding human wayfinding performance.

Vilar, Francisco and Paulo (2012) investigated the use of external information at a higher level of awareness (e.g., signage) as a wayfinding aid, as well as the use of immersive virtual reality (VR) to study indoor wayfinding. Fifty-four volunteers accomplished a wayfinding task (i.e.,

finding a room from the building's entrance) within a virtual building, employing two types of signage systems (i.e., vertical and horizontal conditions). A neutral condition (no signage) was also considered as a control condition to be used as a baseline. Aside from the success of the wayfinding task (getting to the destination), other performance metrics (distance traveled, time spent, number of pauses, and average speed) were analyzed and compared. Although the differences found are not statistically significant, findings suggest that participants assigned to the horizontal condition traveled smaller distances, spent less time, made fewer pauses, and moved at higher average speed than those assigned to vertical and neutral conditions. Gender-related differences were found statistically significant only in the average speed variable (females were faster than males)

Lee and Dazkir (2015) examined library wayfinding by observing and surveying with a questionnaire. There were 15 observations conducted and 219 responses gathered through survey data collection. The survey data were analyzed with correlations, regressions, and Fisher's Exact tests. The results revealed the majority of the participants visited the library twice or more a week. However, more than 25% of the participants answered that they had difficulty finding restrooms. Female participants found wayfinding more difficult compared to male participants. When the participants felt more satisfied with wayfinding, they were more satisfied with the overall library experiences.

Zaugg, Child, Bennett, Brown, Alcaraz, Allred... and Robertson (2016) investigated similar and different wayfinding strategies used by novice and expert patrons at an academic library. The study employed a usability study approach. In total, 12 people, places, or things were identified as important for students to be able to locate within an academic library. Students from one of three groups (high school, freshmen, and seniors) were randomly assigned a scenario requiring them to find the indicated person, place, or thing. Student researchers video recorded participants and took field notes during the wayfinding activity and conducted an interview about participant's experience following the exercise. Total and average time needed to locate the person, place, or thing indicated in the scenario were determined for each group. In addition, wayfinding tools (signs, maps, help desks, technology, and experience) used by participants were identified.

Lou (2018) explored the wayfinding patterns of repeat users and evaluates the impact of patrons' travel habits on their library space usage. The GIS tool ArcMap is employed to visualize library traffic and detect potential patterns of habitual wayfinding. The impact of habitual wayfinding behaviors on library space usage is analyzed. Findings suggest that travel habits formed through past frequent actions can lead to consistent navigation preferences toward certain function units and significant usage differences even within the same function unit in a library. In addition to proposing this modified wayfinding framework and studying its relevance in explaining library space usage patterns, this study also makes a methodological contribution through a novel approach of detecting potential traffic patterns by visualizing routing data and quantifying its details at the route segment level.

Mandel (2018) adopted a multi-method case study research design, guided by Passini's conceptual framework of wayfinding, to investigate library user wayfinding behavior within the entry area of a medium-sized public library facility. The case study research design included document review of the library's wayfinding information system; unobtrusive observation of library user wayfinding behavior; intensive interviews with library users to discuss their views on wayfinding in the Library; and an expert review with library staff and a library wayfinding and signage expert to validate research findings. Overall, the study found library users' wayfinding behavior to be generally inconsistent over time, but that there are users who stick to predominant segments (those segments used heavily to connect two particular nodes, or stops). Those segments tend to be the straightest or most direct segments connecting two given nodes.

Scaife, Bernard Michael (2018) tested an online wayfinding App which the researcher created which was installed at Goldsmiths University library. The aim was to ascertain whether this could improve the ability and perceived experience of students searching for items. A field

exercise was incorporated into the research which investigated six participants' experiences of finding material both with and without the aid of the App, using the semi-structured interview technique. The research also investigated whether there are variances in the nature of difficulties experienced at different study levels including both undergraduate and postgraduate students in its sample. The results indicate that students find an online wayfinding App useful and feel that it reduces the anxiety which surrounds the retrieval of physical items in libraries. There is a demonstrated time saving in using the App, particularly in relation to finding the correct stack. Self-efficacy levels increased following the field exercise. It was also noted that the parallel use of signage in the App and in the library in order to indicate a stack number was a significant factor which improved the wayfinding experience.

Williams (2018) discussed why a flexible concierge service was created; how it revealed wayfinding issues, thereby leading to changes that improved the user experience; and how the participation of a wide range of library staff in the flexible concierge service can build empathy with patrons. Questions asked at the concierge station that first academic year along with feedback from library staff were analyzed using the constant comparative method. Findings indicated users primarily had directional and technology-based questions. As a result of these findings, multiple suggestions for library service improvements were made, and additional improvements are being considered for future implementation.

Rakshikar and Powdwal (2020) provided narratives of variety of tasks completed by participants with average task completion time (ATCT) and explored users' facial expressions and behavior and conducted cause analysis. Findings revealed that majority of participants in university libraries felt that wayfinding is complex and not self-oriented even after attending library orientation, due to the complexity of library buildings and lack of appropriate signage. The analysis of ATCT highlighted that maximum users of the university libraries in Mumbai require inordinate time to find their way and locate the required information source. Many participants experienced confusion, disorientation, indecisiveness and anxiousness while navigating and searching for information sources in libraries. It further revealed that major reasons behind prolonged time required in task completion were user specific such as user unawareness about library physical settings, classification schemes, floor-wise splits in stacking arrangement, availability of facilities, etc.

Su, Lu, Sun and Liu (2021) explored the relationship between university library signage system design and patrons' wayfinding behavior features. This study also investigated the effects of library users' spatial anxiety and environmental familiarity on their fixation on the area of interest of the wayfinding signage system using the differential test and regression. An eye movement tracking method was introduced to record eye movement data during the wayfinding process of participants in the library interior, targeting the cognition and psychology of library users in the wayfinding signage system. The visual guiding usability of landmarks, informational signages and directional signages were quantitatively tested, and the fixation on the signage system between orientation strategy users and route strategy users was compared. Findings indicated that informational signage had the best visual navigating competence. The difference of fixation duration and searching duration between patrons used various wayfinding strategies was significant. The informational signage was most attended by the route strategy users, and the orientation strategy users rarely focused on the directional signage. And participants with high anxiety tended to ignore the visually auxiliary function of the landmarks but paid attention to the directional signage. The participants with low anxiety could capture the landmarks that could not be easily found by the route strategy users. And participants less familiar with the environment were more sensitive to the landmarks.

### **Library Signages use for wayfinding in Academic Libraries**

Library signage is one of the most important elements involved in promoting user satisfaction in any building open to the public. Library Signage is a collective term for all the static

visual symbols and devices used 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. In this section, literature on library signages were reviewed.

Simmons (2005) unobtrusively observed eight Southern New Jersey public libraries in eight different counties to discover if they were practicing the principles of good signage for the benefit of their patrons. A checklist of good signage criteria and ADA requirements was created and used to assess the libraries' signs. Principles of good signage and ADA signage came from prior studies. Using SPSS, frequency tables were generated for each question to show the signage percentages for the libraries in the study. The eight public libraries in the study rated well in the areas of signage design (typeface, spacing of letters, contrast, use of symbols, and color combinations), sign size, sequence and self-service, lighting, readability, effective and positive text, flexibility, and non-glare. Most libraries had at least one directory and signs to announce events taking place in the library. The libraries have poor signage issues, especially in signage consistency and ADA signage requirements. There was a lack of directional and identification signage, which may cause some patrons to ask repetitive directional questions.

Bacon (2011) tested the relative effectiveness of print and digital motivational notice signage. In order to test the effectiveness of these sign formats, a quasi-experiment was conducted between alternating print and digital signs at the circulation desk of the School of Information and Library Science (SILS) Library at the University of North Carolina at Chapel Hill. During the first week of data collection, only the print sign was displayed when the circulation desk was not staffed. In order to reduce the number of variables affecting the effectiveness of the signs, the digital sign was made to appear as similar to the print sign as possible. The print sign was printed on a standard 8.5" by 11" sheet of paper in black and blue ink and stands horizontally in a clear plastic frame. The digital sign is displayed in a 6.5" by 10" Sony digital picture frame, with a solid black border and a display size of 4.5" by 7". The digital file used to create the print sign was displayed on the screen of the digital sign.<sup>1</sup> The digital sign was created for the purposes of this study, but the print sign was already in use by SILS staff. After the completion of data collection, the data were compiled in an Excel spreadsheet, and a *t* test for independent means was applied to evaluate significance at the .05 level. A second *t* test was applied to the data after removing outliers that occurred during exceptional circumstances at the library. The study did not find a statistically significant difference between the number of patrons who went to the library work room to seek assistance when the print sign was displayed and when the digital sign was displayed, the study does suggest that more research with a larger sample size might find the difference to be statistically significant. Furthermore, library staff and student employees feel that the digital sign is more attractive and attention-grabbing than the print sign, and the library has already purchased a digital sign that will be used instead of the print one from now on.

Evans (2011) examined to what extent public libraries commit to biculturalism through their bilingual signage, and how bilingual signage is displayed to alleviate library anxiety among Māori users, and as well to determine to what degree the level of signage in public libraries can be related to the proportion of Māori in the local population. A mixed methods research design has been applied to investigate the quantitative and qualitative information collected in the first phase of the research (an online survey sent to 330 public libraries throughout New Zealand), followed by the second phase of qualitative in-depth data gathering in the form of personal visits to 12 Auckland public libraries to conduct a qualitative content analysis of their signage. The findings reveal that over 50% of New Zealand public libraries have some form of bilingual signage, but they also show that much bilingual signage is employed at the upper level of signage rather than the deeper levels applicable to wayfinding. Practices in bilingual signage that need to be addressed are identified.

Stempler (2013) outlined a case study that addressed signage issues in a circulating book collection at a four-year university library. A consistent and comprehensive stack signage system involving the implementation of a color-coded scheme, along with a variety of new informational

and wayfinding signs, was designed. The project also supported the creation of a corresponding digital map linked to library catalog. The redesigned stack signage system contributed to a dramatic increase in the number of books checked out from the circulating collection. A pattern of positive responses observed during reference services and library instruction sessions also supports the favorable outcome of the project.

Rokade (2015) examined the role of pictogram in library, description, area, importance, use, types, standards and the opinions of users and librarian about pictogram. The survey of the role of pictogram and users was carried out of public, district, university, special, non government organization (NGO) and university library of Gadchiroli district in the state of Maharashtra. It was found that 92% disabled users stated the role of pictogram quite useful and important from entry to exist in library, 90% to find out modern services, 87 % OPAC, and 93 % facilities available in the library. The other user stated the role of pictogram 94 % Interior to Exterior work, 83 % way finding of library and other sections, 91 % rules of library, 91 % drinking water , 95 % toilets, 96 % to locate books and services and facilities. It was concluded that the pictogram are quick and clear communication without language or words, understood independently of writing, words, culture and language and indicator of path finding, interpreted quickly or clearly and gives knowledge and save the time of users, draw attention and therefore useful in library and for users.

Duran (2016) investigated the relationship between utilized signage types, familiarity and confidence in respondents' cognitive maps in academic libraries. Besides, it is to understand the influence of utilized signs on wayfinding performance. The experiment was administered in Bilkent University Library. Seventy-one non-architecture university students from Bilkent University participated in the study, which was conducted in two parts. The first part was a library tour which involved reaching two target rooms. The second part utilized a questionnaire which inquired about respondents' familiarity, confidence in their cognitive maps and signage. The study found that although newcomers had higher number of wrong turns and time spent to reach destination points, there was no difference in hesitation. As in other types of spaces, wrong turns and time spent decreased with increasing familiarity.

Kasa, Yani and Gani (2016) investigated the state of selected libraries in a library complex. The essence is also to rekindle discourse among professionals to proffer ways of improving signs in the library through shared experiences, problems with application of the signage systems and ultimately produce alternative solutions to those problems as it affect the library environment and the uniformity of purpose using the universal design movements to vanguard the use of signage systems. The research utilized survey of selected libraries within the Ahmadu Bello University Library complex to observe, investigate types of signage systems that prevails these library spaces and obtain evidences (photographs) in order to compare with the universal design thinking which elaborates on the imperatives of signs in public places. Literature were consulted to broaden understanding, the consistency, maintenance and sustenance of signage systems in libraries. The study found that the library under study use of signage systems. However, many have signs that are defaced, old or depleted and in some cases need immediate replacements. This automatically affects the essence of using signage systems in the library buildings and against the universal design thinking which advocated a self-exclaiming space. Further investigations show that the assigning of responsibilities on the design, maintenance and sustenance of library signs is not consistent across the libraries visited.

Warren and Epp (2016) presented an overview of how the University of Manitoba Libraries adapted the concept of a "kindness audit" to identify and document space, usability, and signage concerns and successes across all 20 system locations. The paper included background on the development of the space experience report methods and potential methodological alternatives when they may be appropriate. Emphasis was on practical, low-cost assessment, and the right of users to be comfortable and self-navigate in library spaces. The results of the kindness audit identified several major trends overall: use of inconsistent homemade signage, outdated signage

for technology and exits, lack of sufficient electrical outlets, and inaccessibility issues at service desks.

Fauchelle (2017) examined the different aspects of language that are present in the signage, handouts and websites of public libraries. It discusses the extent to which this language reflects the varying demographics of library clients. The study adopted a qualitative methodology which took a document analysis approach and utilized an inductive-coding technique to analyse data collected from four lower North Island libraries in New Zealand. Five language aspects were identified from the collected data: monolingual, bilingual and multilingual language; language context; welcoming and prohibitive language; language consistency; and jargon. The nature and incidence of these aspects were evaluated for each of the four libraries. In some cases, the libraries achieve an accurate reflection of client demographics through their language. However, each library could make some changes to their use of language to better accommodate their distinct communities.

Enweremadu Nwachukwu and Nwachukwu (2019) examined patronage by users in federal university libraries in South East, Nigeria. Three specific objectives guided the study. Descriptive survey research design was adopted in the study. The population consist of twenty-four thousand, two hundred and sixty-three (24,263) users. The sample size is three hundred and eighty-eight (388). Simple random sampling technique was used in selecting the sample respondents. A questionnaire titled Influence of Library Aesthetes on Users' Patronage Questionnaire (ILAUPQ) and observation checklist were used in data collection. Simple percentage, mean and standard deviation were used for data analysis. The study found that the available library aesthetics facilities are ventilation, signage, lightning, art drawing; interior and exterior decoration; library aesthetics influence users' educational purpose of library patronage; and users' perception is that library aesthetics make the library conducive, comfortable and exciting for reading, learning and research.

Emmanuel (2020) examined library signage and students' utilization of information services in university libraries in the United Kingdom. This study adopted survey research design. The study was conducted in university libraries in the United Kingdom. The population of the study was 4220 registered undergraduate students in faculty of education. The simple random sampling technique was used in selecting 2 Universities in the United Kingdom, alongside 4220 registered undergraduate students which constituted the sample size for the study. The study found that information guide predict students' utilization of information services in university libraries in the United Kingdom. The study also found that the extent to which information guide predict students' utilization of information services in university libraries in the United Kingdom is significant.

Thompson and Monokpo (2020) examined library signage and students' utilisation of information services in the university of Calabar library. Analytical survey research design was used for the study. The population of the study was 4,220 registered undergraduate students in faculty of education, University of Calabar library. The sample of the study was 422 registered undergraduate students in faculty of education, University of Calabar library. The sampling technique was simple random sampling. The researcher developed instrument entitled "Library Signage Questionnaire" (LSQ) and "Students' Utilization of Information Services Questionnaire" (SUISQ) was used in collecting data for the study. Hypotheses were tested at .05 level of significance using F-Value of simple linear regression. The findings of the study revealed that instructional guide and regulatory signage predict student's utilization of information services in the university of Calabar library. It was concluded that library signage ensures coordination in any university libraries.

Onwuchekwa (2020) addressed the different roles of signages and buttress the fact that Digital signage can play a major role in this communication process in addition to demonstrating a "green" environment for library patrons. Graphic Information can be displayed to the public in meeting rooms, at the front desk, in vestibules or cafeterias/cafes. The messaging can range from



programs being held at the library to public service announcements to emergency messaging and so much more. There is no limit to the information that a library signage can convey to its users.

## RESEARCH METHODOLOGY

### Research Methodology adopted for the study

This study adopted the qualitative research methodology

## DATA PRESENTATION AND ANALYSIS

Types of Library Signages available in the Federal University of Education, Zaria Library  
Knowledge of students on the available Library signages in Federal University of Education, Zaria Library

Challenges associated with the use of Federal University of Education Zaria Library

### Types of Library Signages available in the Federal University of Education, Zaria Library

This objective of the study sought to identify the types of library signages that are available in the Federal University of Education, Zaria Library. Two categories emerged from the narratives of the participants of this study namely: i) Directional Signages and ii) Technical Signages.

**Table 4.2 Types of Library Signages available in the Federal University of Education, Zaria Library**

| Research Questions                                                                                  | Categories                | Subcategories                                                                   |
|-----------------------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------|
| What types of Library Signages are available in the Federal University of Education, Zaria Library? | 1. Directional Signages   | 1.1 They have a blueprint on how to use the library                             |
|                                                                                                     | 2. Informational Signages | 1.2 It's written on the top of the door                                         |
|                                                                                                     |                           | 2.1 There are some signs that are number that I used to locate to find my books |

### Category 1: Directional Signages

This category emerged from the narratives of participants related to the types of library signages that are available in the Federal University of Education, Zaria library. It is made up of two subcategories that are manifest contents of the narratives of participants namely: They have a blueprint on how to use the library and it is written on top of the door. These subcategories are further explained below:

***They have a blueprint on how to use the library:*** This subcategory manifested as a type of library signage that is available in the Federal University of Education, Zaria library from the narratives of participants. This blueprint shows the direction to the different sections of the library. A participant remarked that "*They have a blueprint. They design it on how to use the library. And the different sections*" **Participant 1.**

***It is written on top of the door:*** This subcategory also emerged as a manifest content related to types of library signage that is available in the Federal University of Education, Zaria library. Participants said the signages are like tags and signs on top of the doors in the library.

*"It is written on the top of the door; you can see them when you enter the library"* **Participant 4.**

*"They have a tag that is being placed on the door post of the library, we read the tag and know which section you will go"* **Participant 5**

*"The signs are the ones on the doors to the different sections of the library"* **Participant 6**

*"The signs are the ones on the doors to the different sections of the library"* **Participant 7**

Similarly, Participant 8 said *"The signs I know are the tags on every door in the library..."*. Participant 9 also recounted that *"The signs in the library are the ones of the doors that direct and show you what section of the library you are"*. Finally, Participant 10 also reiterated that *"The sign on the doors tells me where I want to go"*.

### **Technical Signages**

This category labelled a subcategory that emerged as a type of library signage that is available in the Federal University of Education, Zaria library. The manifest subcategory (There are some signs that are numbers that I used to locate to find my books) is further explained below:

***There are some signs that are numbers that I used to locate to find my books:*** This subcategory emerged from the narrative of a participant related to the types of library signages that are available in the Federal University of Education, Zaria library. These numbers are part of the call numbers on the shelves in the library. Participant 3 related that *"there are some signs in which I forget the number that I used to locate to find my books"*.

### Knowledge of students on the available Library signages in Federal University of Education, Zaria Library

This objective of the study explored the knowledge of students on the available library signages in Federal University of Education, Zaria library. Three categories emerged from the narratives of participants of this study namely: i) Way finding tools ii) Signs on the door and iii) No knowledge.

### Knowledge of students on the available Library signages in Federal University of Education, Zaria Library

| Research Questions                                                                                                         | Categories            | Subcategories                                |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------|
| What is the knowledge of students on the available library signages in the Federal University 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            |
|                                                                                                                            | 2. Signs on the doors | 1.3 Direct you                               |
|                                                                                                                            | 3. No Knowledge       | 2.1 The signs are the ones on the doors      |
|                                                                                                                            |                       | 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 University 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 University 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 University of Education Zaria Library. Participants knowledge of library signages also revolves around signages being used to locate and find books.

"*...used to locate to 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 University 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.

#### Category 2: Signs on the door

This category sums up narrative related to knowledge of students on the available library signages in the Federal University 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 University 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.

### Category 3: No Knowledge

This category also emerged from narratives of participants related to knowledge of students on the available signages in the Federal University 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"*.

### Factors that affect the use of Library signages to locate information resources, services, and facilities by students in the Federal University of Education, Zaria library

Three categories emerged from narratives of participants of this study related to this objective of the study. They include: i) Illegible and inappropriate Signaging ii) Lack of knowledge of library signages and iii) Do not use the information resources of the library.

### Factors that affect the use of Library signages to locate information resources and services by students in the Federal University of Education, Zaria library

| Research Questions                                                                                                                                                           | Categories                                             | Subcategories                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|------------------------------------------------------------------------|
| What factors affect the use of Library signages to locate information resources, services, and facilities by students in the Federal University of Education, Zaria library? | 1. Illegible and inappropriate Signaging               | 1.1 The signs are not too clear.                                       |
|                                                                                                                                                                              |                                                        | 1.2 Signs are tiny especially the ones on the shelves                  |
|                                                                                                                                                                              |                                                        | 1.3 Some of the shelves just have signs on the side no on the front    |
|                                                                                                                                                                              | 2. Lack of knowledge of library signages               | 2.1 If you don't know the book you want to read you will be confused   |
|                                                                                                                                                                              |                                                        | 3.1 Most of us just come to the library with our lecture notes to read |
|                                                                                                                                                                              | 3. Do not use the information resources of the library |                                                                        |

### Challenges associated with the use of Federal University of Education Zaria Library

This objective of the study determined the challenges associated with the use of Federal University of Education Zaria library. Four categories described these challenges namely: i) Library signage problems ii) Inadequate Information Resources iii) Library Maintenance problems and iv) Librarians not approachable.

### Challenges associated with the use of Federal University of Education Zaria Library

| Research Questions                                                                                 | Categories                  | Subcategories                                                    |
|----------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------|
| What Challenges do students face in the use of the Federal University of Education, Zaria Library? | 1. Library signage problems | 1.1 It's not every book that is by the signage                   |
|                                                                                                    |                             | 1.2 What they know about the book is not what is on the signage. |
|                                                                                                    |                             |                                                                  |

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|                                     |                                                                                                                          |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| 2. Inadequate Information Resources | 1.3 The difficulties I encounter is that when you get to the section where you will find the book, they are plenty there |
| 3. Library Maintenance problems     | 2.1 The books are not adequate                                                                                           |
|                                     | 3.1 There is no light in the library, the environment is not conducive.                                                  |
| 4. Librarians not approachable      | 3.2 Noise in the library                                                                                                 |
|                                     | 4.1 The librarians do not help                                                                                           |

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### Library Signage Problems

This category was used to label related subcategories that emerged from the narratives of participants of this study related to challenges associated with the use of Federal University of Education Zaria library. It is made up of three subcategories namely: i) It is not every book that is by its signage ii) What they know about the book is not what is on the signage and iii) The difficulties I encounter is that when you get to the section where you will find the book, they are plenty there. These subcategories are further explained below:

***It is not every book that is by its signage:*** This subcategory depicts one of the challenges associated with the use of the library. Some wayfinding tools are not efficiently directing users to information resources and services. Signages are not in tandem with the addresses of information resources.

*"It is not every book that is by the sign..."*Participant 1.

*"Some particular books are not where they are supposed to be..."*Participant 3.

*"If you don't know the section that has the books for your department you will suffer to get the right books"*Participant 9.

***What I know about the book is not what is on the signage:*** This subcategory also emerged as one of the challenges associated with the use of the library. A Participant lamented about signages not really describing information resources adequately, as what he knows about information resources are not what signages are describing. Participant 1 reported that *"What I know about the book is not what is on the signage"*.

***The difficulties I encounter is that when you get to the section where you will find the book, they are plenty there:*** This subcategory also emerged as one of the challenges associated with the use of the library that is related to signages. A participant recounted that signages in the library just directs users to the section, users will then have to look for the book they want from a stack of all other books in the section. Participant 6 said *"The difficulties I encounter is that when you get to the section where you will find the book, they are plenty there"*.

### Inadequate Information Resources

This category labelled the subcategory that emerged as a challenge associated with the use of the library. It is made up of one subcategory namely: The books are not adequate. A participant lamented the fact that information resources in the library are not efficient and adequate. Participant 4 recounted that *"the books are not efficient for all of us, they are not adequate"*.

### Librarians not approachable

This category was used to label the manifest subcategory related to challenges associated with the use of Federal University of Education Zaria library. It is made up of a subcategory namely: The librarians do not help. Participants of this study complained of the attitude of librarians, stating they are not helpful or approachable when users need help.

*"The librarians just check for your id cards but hardly render any assistance when it comes to locating information resources"*Participant 7.

Similarly,

"*. The Librarians are not friendly. If you don't ask them they will not assist you*"Participant 10.

## CONCLUSION

In conclusion, this qualitative study sheds light on the knowledge of students regarding library signages at Federal University of Education Zaria library. It has identified two main types of signages: directional and informational. It could be concluded that the knowledge of library signages is an important issue that influences library patronage. Navigational and wayfinding challenges are also some of the sources of library anxiety among students of Federal University of Education, Zaria. It could also be concluded that library anxiety from other sources like the approachability of library personnel is also a major cause of low patronage in the library. Addressing challenges with the use of library will enhance students' navigation and utilization of library resources effectively. Implementing clearer and more informative signages, improving access to information resources, enhancing library maintenance, and fostering a more approachable librarian-student relationship are crucial steps towards optimizing the library experience and facilitating academic success within the Federal University of Education Zaria community.

## RECOMMENDATIONS

Based on the findings of the study on students' knowledge of library signages at Federal University of Education Zaria library, several recommendations can be proposed to address the identified challenges and enhance the library experience:

1. The library management could explore the integration of digital signage solutions or mobile applications to provide real-time updates on library services, resources, and events. Leverage technology to enhance the visibility and accessibility of library signages.
- 2 The library should develop and implement signage orientation sessions or workshops for students to familiarize them with the various types of library signages and their meanings. This will empower students to navigate the library effectively.
3. The management of the University should allocate resources to expand and update the library's collection of information resources, including books, journals, and digital materials. Ensure these resources align with the academic needs and interests of students and faculty.
4. The library management should implement regular maintenance schedules to address any issues with signage visibility, cleanliness, or functionality promptly. Create a system for students to report any signage-related concerns for timely resolution.
- 4b. The library management should encourage librarians to be more proactive in assisting students with navigation and information retrieval. Foster a welcoming environment where students feel comfortable seeking help from librarians whenever needed.

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