



INFORMATION LITERACY AS A PREDICTOR FOR DRIVING DATA LITERACY IN ACADEMIC LIBRARY

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• ABSTRACT

In virtually every aspect of human endeavour, there is the need for information and information literacy, in particular, to excel in evaluating the sources of data and the appropriate manipulations required. An individual with the necessary information to solve a problem is weighty and not easily swayed. Information is key moreover, when it complements the reason for which it was born. Literacy is the ability to read and write, which is basic through being literate it extends to how an individual can explore other aspects to find a way to do things effectively. Hence, literacy is getting it done in the realm of information. Information literacy as a predictor of driving Data Literacy is apt in this era of Data increase and technological advancement. Librarians need information literacy to drive data literacy which is the ability to drive meaningful information from data. The study adopted descriptive Survey Research design and 85 total population of librarians in the five (5) Tertiary institutions in Rivers State, Nigeria were used. Three objectives and three research questions guided this study. the questionnaire tagged Questionnaire for Information Literacy as a Predictor for Driving Data Literacy:(QILPDDL) was used. This study, therefore, showcased the yardstick used in information literacy and determine the degree of readiness by librarians to embrace data literacy alongside information literacy

INTRODUCTION CONT'D

- The fact that information literacy is an umbrella word housing the various types of literacy makes it pretty vital to be an open programme for every librarian to get involved in and adopt as a key pointer to gaining knowledge about data acquisition, manipulations and interpretation.
- Prado and Marzal (2013) posit that data literacy is the component of information literacy that enables individuals- to access, interpret, critically assess, manage, handle and ethically use data.

PROBLEM STATEMENT

- The growing social importance of data and its utilization in every sector of society is a concern of , analysis, interpretation and presentation right to enable them to draw up valuable objectives and decisions to smoothly run the organization information professionals and other organizations who aspire to also get data collection.
- Academic libraries are known for the acquisition, selection, cataloguing and classification of information materials that aid teaching, learning, and research in their various institutions.
- Having these specifications in mind the need for a fluent data keeping which starts from its collections is sacrosanct as information literacy is too. Therefore, the drive to hitch-free data literacy is predicted to be achieved through information literacy hence this study further buttresses the assertion.



OBJECTIVES OF THE STUDY

1. To investigate how the knowledge of information literacy will spur data literacy in academic libraries
2. To determine the yardsticks that information literacy employs to drive data literacy
3. To ascertain whether academic libraries upgrade information literacy programmes to drive data literacy



RESEARCH QUESTIONS

1. Does the knowledge of information literacy spur data literacy in academic libraries?
2. Are there yardsticks employed through information literacy to drive data literacy?
3. Do academic libraries upgrade information literacy programmes to drive data literacy?



BRIEF LITERATURE

- . To Ezeani (2016) information literacy is a major task for academic libraries as a research centre stage. They are mandated to offer bibliographic instructions to their patrons even as they ensure the librarians are trained in information literacy programmes through organized workshops to enable them to carry out their services and harness information effectively.
- Thanuskodi (2019) in his study quoted Johnson (2012), Koltay (2016), Pothier and Condon (2019), Haendel et al. (2012) that data literacy extends to the skills required for sorting, processing, and filtering vast amounts of data, including search techniques, sorting algorithms, filtering mechanisms, and data processing methods

METHODOLOGY

- The study adopted the descriptive survey research design. The population of this study is eighty-seven (87) librarians from tertiary institutions in Rivers State, Nigeria. These librarians are from: the University of Port Harcourt (23 Librarians), Rivers State University (23 Librarians), Ignatius Ajuru University of Education (19 Librarians), Captain Elechi Amadi Polytechnic (14 Librarians), and Kenole Polytechnic Bori (8 Librarians).
- Considering the small population size, the total enumeration method (census) was adopted to cover all 87 librarians across the academic libraries in Rivers State, Nigeria. The instrument found suitable for this study is the questionnaire tagged Questionnaire for Information Literacy as a Predictor for Driving Data Literacy:(QILPDDL) which was answered using the four-point Likert scale of Strongly Agree (SA), Agree (A), Strongly Disagree (SD) and Disagree (D). Out of **the 87 copies** of the questionnaires distributed **85 were retrieved** and found valid for analysis. The data was analysed using a frequency count of simple percentages. Table 1 shows the representation.

DATA ANALYSIS AND DISCUSSION OF FINDINGS

Table 1:85 were filled and returned, indicating a 97.7% response rate

Population Distribution:

*Census sampling technique was used to sample all 87 members of the population, 85 were correctly filled

| SN | INSTITUTIONS | POPULATION SAMPLED | RETURNED | PERCENTAGE |
|----|--|--------------------|----------|------------|
| 1 | University of Port Harcourt, Choba | 23 | 23 | 27.1 |
| 2 | Rivers State University, Nkpolu-Oroworukwo Port Harcourt | 23 | 22 | 25.9 |
| 3 | Ignatius Ajuru University of Education, Rumuolumeni | 19 | 18 | 21.2 |
| 4 | Captain Elechi Amadi Polytechnic, Rumuola | 14 | 14 | 16.5 |
| 5 | Kenole Polytechnic, Bori | 8 | 8 | 9.4 |
| | TOTAL | 87 | 85 | 100 |

RQ1: Do the knowledge of information literacy spur data literacy in academic libraries?

| LITERACY | SA | A | SD | D | Mean | Decision |
|--|----|----|----|---|------|----------|
| Literacy is the ability to read, write, and show competence towards specified areas of discipline | 42 | 36 | 4 | 3 | 3.38 | Agree |
| To be literate is to be proficient in the contemporary types of literacy like financial, technology, media, data etc | 38 | 45 | 2 | 0 | 3.42 | Agree |
| Being literate is an exposure to what happens in and around the information economy of our society | 47 | 20 | 10 | 8 | 3.25 | Agree |
| Literacy is being able to express thoughts and ideas required to dissect a discipline | 42 | 36 | 6 | 1 | 3.40 | Agree |
| Weighted mean | | | | | 3.36 | High |

Analysis Cont'd

| | INFORMATION LITERACY | SA | A | SD | D | Mean | Decision |
|---|---|----|----|----|---|------|----------|
| 5 | Librarians need to be information literate to drive data and other literacy types | 52 | 33 | - | - | 3.61 | Agree |
| 6 | Information-literate librarians can explore other literacy types | 62 | 18 | 3 | 2 | 3.65 | Agree |
| 7 | With the competency of being information literate librarians can locate and evaluate information where necessary | 42 | 42 | 1 | - | 3.48 | Agree |
| 8 | Information literacy is well-packaged to aid in identifying, planning, gathering, evaluating, managing and presenting information | 58 | 20 | 5 | 2 | 3.58 | Agree |
| | Weighted mean | | | | | 3.58 | High |

Data Literacy

| | DATA LITERACY | SA | A | SD | D | Mean | Decision |
|----|--|----|----|----|---|------|----------|
| 9 | Data literacy is a vital type of literacy for skills in evaluation, analysis and data interpretation | 54 | 31 | - | - | 3.64 | Agree |
| 10 | Data literacy is a prerequisite to being informed on data collection to its documentation | 36 | 42 | 3 | 4 | 3.29 | Agree |
| 11 | Data literacy enables librarians to evaluate information and its sources critically | 33 | 49 | 2 | 1 | 3.34 | Agree |
| 12 | Data literacy helps individuals and organizations like libraries make better decisions by providing them with the ability to understand and analyze data | 54 | 30 | 1 | - | 3.62 | Agree |
| 13 | Data literacy creates a more data-driven culture and builds stronger data governance postures | 68 | 17 | - | - | 3.80 | Agree |
| | Weighted mean | | | | | 3.54 | High |

TABLE 2 ANALYSIS EXPLAINED

- **The Table 2** above shows the opinions of respondents on whether the knowledge of information literacy spur data literacy in academic literacy. The table was broken into Literacy, Information Literacy and Data literacy. These different headings brought out the knowledge of information literacy and its drive to build data literacy. The responses above showed in agreement the crucial positive impacts of information literacy to data literacy. The weighted means of these breakouts were high with Literacy having 3.36, Information literacy 3.58 and Data literacy 3.54 respectively. The weighted mean on the whole is 3.54, which is higher than 2.5 cut-off level with which shows the importance it brings to the drive of data literacy in academic libraries

RQ2: Are there yardsticks employed through information literacy to drive data literacy?

• **Table 3: Mean opinion on the Yardsticks that Information Literacy Employs**

| | INFORMATION LITERACY AND DATA LITERACY | SA | A | SD | D | Mean | Decision |
|---|--|----|----|----|---|------|----------|
| 1 | Through information literacy programmes librarians will excel in data literacy | 38 | 45 | - | 2 | 3.40 | Agree |
| 2 | Creating a course on information literacy that will house data literacy will enable librarians to be fluent in handling data | 42 | 36 | 1 | 6 | 3.34 | Agree |
| 3 | One of the major concerns of academic libraries is to ameliorate information literacy to boost data literacy through workshops, information literacy programmes and talk shows | 62 | 23 | - | - | 3.73 | Agree |
| | Weighted mean | | | | | 3.49 | High |

Source: Field Survey, 24

RQ2

- Table 3 above shows that academic libraries employ some yardsticks to improve data literacy. The yardsticks listed were rated high by the librarians thus the weighted mean of 3.49 showed that they were in support of the items and also higher than the cut-off of 2.5 level set. This finding is in consonance with Marzal (2013) posit that data literacy is the component of information literacy that enables individuals- to access, interpret, critically assess, manage, handle and ethically use data. He further reiterated that the academic libraries work hard to enhance the data literacy level of librarians along side information literacy

RQ3: Do academic libraries upgrade information literacy programme to drive data literacy?

• **Table 4: Mean opinion on Academic Libraries upgrades IL to drive DL**

| | ACADEMIC LIBRARY AND DATA LITERACY | SA | A | SD | D | Mean | Decision |
|---|--|----|----|----|---|------|----------|
| 1 | Data literacy drive in academic libraries is championed by information-literate librarians | 61 | 20 | 2 | 2 | 3.40 | Agree |
| 2 | Information literacy is an engine that propels data literacy in academic libraries | 48 | 36 | 1 | - | 3.34 | Agree |
| 3 | Academic libraries organize information literacy workshops to arm the librarians on how to tackle data literacy issues that may arise while rendering services | 42 | 38 | 4 | 1 | 3.73 | Agree |
| 4 | Librarians improve communication skills through data literacy | 36 | 42 | 4 | 3 | 3.31 | Agree |
| | Weighted mean | | | | | 3.45 | High |

TABLE 4 EXPLAINED

- Table 4 above shows responses on how academic libraries work towards upgrading IL to drive DL.
- The data represented in table 4 above shows the significance of information literacy in the drive to get it right on data literacy in academic libraries. All items mean scores of 3.40, 3.34, 3.73, and 3.31 were greater than the cut-off mean score of 2.5. On the whole the total mean score of 3.45 were also greater than the cut-off mean score of 2.5. This implies that academic libraries actually upgrade on information literacy to drive data literacy. The finding is in agreement with Ezeani (2016) which posits that information literacy is a major task for academic libraries as a centre stage of research. They have the mandate of offering bibliographic instructions to their patrons even as they ensure the librarians are trained on information literacy programmes through organized workshops to enable them carry out their services and harnessing of information effectively. In essence, one must be literate to work on an assignment or activity involving skills.

CONCLUSION

- The study examined and gave insight on the need for the knowledge of information literacy to drive data literacy. Although the dearth of literature posed some challenges in gathering information for this study. The results got from the research questions indicated that librarians are in support that IL is important and need workshops, conferences regularly to keep equipping them for activities requiring the experience gained. The growth of DL is aligned to the exposure gained from being information literate.

Thank You..

