

## **DISSEMINATING AND MEASURING RESEARCH IMPACT THROUGH ACADEMIC SOCIAL MEDIA AMONG LIBRARY AND INFORMATION SCIENCE EDUCATORS IN NIGERIAN UNIVERSITIES**

**By**

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### **Abstract**

*The study examined the role of academic social media(ASM) as a medium of disseminating and measuring research impact among library and information science educators(LISE) in Nigeria. The study was guided by three specific objectives, these include type/types of ASM utilised by LISE in disseminating their research findings, to ascertain the extent LISE in Nigerian universities disseminate their research findings using ASM platforms, and to determine the frequency LISE in Nigerian Universities measure their research impact through ASM. A descriptive survey research design was used for the study and the target population consisted of 348 LISE in 37 University-based Library Schools in Nigeria. A sample size of 258 LISE was drawn from the population using the multistage sampling technique. A structured questionnaire with a five-point likert scale was designed in line with the research questions. 30 copies of the validated, corrected, and returned questionnaire was pretested using the Cronbach alpha method and the following reliability coefficients were obtained in the 3 sections of the questionnaire: 0.846, 0.924 and 0.978 respectively A total of 258 copies of the questionnaire were administered on respondents (online) through their respective e-mails. The response rate showed that 190 copies of the questionnaire were retrieved. Percentage, frequency counts, and mean scores were used in the analysis of data. Results showed that the majority of LISE do not disseminate their research findings in ASM platforms. It was equally revealed that respondents frequently monitored the number of citations their research works had received. The study concluded that the low use of ASM in disseminating research findings could be a result of the lack of ASM policy use in Nigerian universities. The study recommended amongst others that LISE should ensure they disseminate their research findings through ASM to facilitate global visibility.*

### **Introduction**

Research is the source of knowledge and sustainable national development in every society irrespective of their level of development. Universities are one of the major institutions saddled with the responsibility of researches in various countries, Nigeria inclusive. Universities promote research for societal development and lifelong learning and most researches in universities is carried out by faculty members. Therefore, research productivity is an indispensable criterion used in measuring the career progression of faculty members. Library and Information Science (LIS) educators are also expected to research their counterparts in other disciplines because it is also their professional obligation. Research in library and information science is a systematic investigation of issues relating to practice and education in library and information science to increase the sum of knowledge in the field. Dongardive (2013) views research in Library and Information Science as the gathering and analysis of original data on a problem related to librarianship and conducted within the library schools according to scientific and scholarly stands.

Research in LIS can only have a significant impact on the development of the field if the research findings are available to the people who require them. Quite often, LIS research

findings are disseminated to stakeholders through traditional methods such as publishing in journals, books, and conference proceedings. Most research findings published through traditional methods are mostly hosted by libraries and some of these publications are not subscribed to by most Nigerian libraries as a result of information explosion and inadequate funds. This may result in poor visibility of LIS research publications. This view was corroborated by Gichygu (2018) who stated that most LIS researches are mostly published in local journals which have resulted in poor visibility. Therefore, there is a strong need to solve this problem by using other digital channels to disseminate research findings such as academic social media. Klar *et al.* (2020) stressed that academic social media provides scholars with the most direct route of sharing their research findings. For researchers do no longer wait for stakeholders who are interested in ongoing research to search for publications rather scholars transmit research results more directly to potential stakeholders.

It is not just enough for a researcher to undergo research and publish its findings, it is equally important to monitor the impact of such findings on stakeholders. Several traditional indices can be utilised in measuring the impact of research such as citation counts; h-index and journal impact factor developed by ISI, Web of Science, Scopus, and other internationally recognised indexing bodies. These methods in most cases measure the productivity of a researcher without monitoring the social impact of research. This view was also corroborated by Ravenscroft (2017) who noted that traditional metrics such as h-index and g-index measure impact based mainly on citation of scientific work while academic social media have provided new cues to assess the academic impact of scholars. For it allows users to tag, annotate, bookmark, and rate scientific literature. It is worthy to note that academic social media complements traditional methods of measuring research impact by providing alternative metrics for tracking research impacts such as the number of readerships, downloads, bookmarks, and feedbacks among others.

Academic social media platforms such as Google Scholar, Researchgate, Academia.edu, Linkedin, Mendeley, Methodspace, Impact Story, and Open Researcher and Contributor Identifier (ORCID) serve as a vehicle for LIS educators to disseminate their research findings and also track research impact.

### **Statement of the Problem**

Library and information science educators in Nigeria research career progression in addition to contributing to the frontiers of knowledge and breaking new grounds in the field. It has been observed that most library and information science research findings were not visible globally and this has resulted in a decrease in the number of citations in library and information science publications. (Gichugu, 2018). Research impact assessment in the field of LIS was majorly determined by citation counts. This method is inadequate because of the time lag for the accumulation of citations and this has translated into a low level of research impact evaluation.

These scenarios may be as a result of poor or non-utilisation of new technological tools and techniques such as academic social media. This paper, therefore, seeks to investigate the utilisation of academic social media in disseminating and tracking research impact among library and information science educators in Nigerian universities.

### **Objectives of the study**

The objectives of the study are:

1. To determine the types of academic social media utilised by library and information science educators in disseminating research findings;

2. To ascertain the extent library and information science educators in Nigerian universities disseminate their research findings using academic social media platforms
3. To determine the frequency library and information science educators in Nigerian universities measure their research impact through academic social media.

### Literature Review

Academic social media platforms have become key tools for researchers to disseminate their research findings and track impact. As a result of these developments, several studies have been carried out on utilisation of academic social media for dissemination and tracking of research impacts. Salami *et al.* (2020) also examined the use of academic social media in enhancing the research output of faculty members in Federal Universities in Nigeria. The findings of the study further revealed that faculty members utilized three major types of academic social media platforms are Academia.edu, Google Scholar, and Research Gate. Simisaye(2014) adopted a survey research design to investigate the awareness and utilization of social media for research productivity among faculty members in Tai Solarin University of Education, Ijagan, Ogun State findings from the study revealed that the major reasons respondents utilised social media in the research were to communicate research output,

Mikki *et al* (2015) determined the digital presence of Norwegian scholars in various academic social media platforms such as Researchgate, Academia.edu, Google Scholar, Researcher ID, and ORCID The findings of the study revealed that 37% of the researchers at Bergen have at least one profile and Research gate was the most widely used platform. Adetayo (2021) adopted a survey research design to investigate the use of social media and the research productivity of lecturers in private universities in Ogun State, Nigeria. The data further revealed that respondents do not utilise social bookmarking tools and citation tools in enhancing their research productivity. Biney-Nyamekye and Joubert (2016) conducted a study on how academics at the University of Ghana use social media to disseminate research findings. The study found out that the majority of the respondents do not utilise academic social media in disseminating their research findings. In the same vein, Tai and Pieterse (2017) conducted a study on why academics use academic social media networking sites in Isreal. The population of the study comprises 298 faculty members at three academic institutions in Isreal. The findings of the results revealed that none of the participants obtained high scores from engaging in various activities in academic social media platforms such as information consumption, information sharing (uploading abstracts and full text articles), and information sharing.

### Research Methods

A survey research design was adopted for the study because it involves a population sample. The population of the study comprises 348 as of 2020 library and information science educators in 17 Federal, 15 State, and 5 Private owned universities in Nigeria offering library and information science. Multi-stage sampling technique was used in select 28 universities and 258 library and information science educators for the study. The study adopted a multi-stage sampling technique because the study adopted both cluster sampling and random sampling techniques using the most suitable method at each stage of sampling.

The study used an online questionnaire as the instrument for data collection. The questionnaire was administered to the respondents through their email addresses. The email addresses were obtained from the 2020 Directory of the National Association of Library and Information Science Education Members and List of Library and List of Library and Information Science Schools in Nigeria. The researcher carried out the study using an online questionnaire because the study was carried out during the pandemic which encourages online meetings. The questionnaire was self-designed contained 22 items and was divided into three sections. The questionnaire was pre-tested using a sample of 43 LISE drawn from the Federal

University of Technology Minna, Babcock University, Illisan Remo, and Ambrose Alli University Ekpoma. However, 30 copies of the questionnaire were returned and correctly filled. The scores obtained from the pilot test of the instrument were subjected to reliability analysis using Cronbach Alpha and had the following alpha scores: type/types of ASM used by LISE in disseminating their research findings= 0.846, extent LISE in Nigerian universities disseminate their research findings using academic social media platforms =.0.924 and the frequency LISE in Nigerian universities measure their research impact through ASM = 0.978 Data were analysed using frequency counts, percentages and mean.

Descriptive statistics such as frequency, percentages and mean scores were used to analysis the data.

### Results and Discussion

Out of the 258 copies of the questionnaire administered to the library and information science educators in Nigerian Universities 190 copies were filled and found usable this represents a 74% success rate.

**Table 1:Types of Academic Social Media Utilised by Library and Information Science Educators in Disseminating their Research Findings**

S/N	Statement	Frequency	Percentage(%)
1	Research gate	82	43
2	Academia.edu	75	39
3	Google scholar	50	26
4	ORCID	38	20
5	Linkedin	34	18
6	Mendeley	15	8
7	Methodspace	10	5
8	Impact story	3	2

Source: Field work, 2020

Table 1 shows that none of the academic social media platforms obtained high scores as regards to dissemination of research findings by respondents. Nevertheless, the most common platform utilised by respondents is Researchgate 82(43%). The low use of ASM platforms by respondents maybe because they are not obliged by their institutions to utilise various academic social media in disseminating their research findings. Olakunle and Adeyeoye (2014) reported that faculty members in Tai Solarin University of Education, Ijagun, Ogun State the major reasons respondents utilised social media in the research were to communicate research output.

**Table 2: Extent of Dissemination of Research Findings**

S/N	Statement	Very High 5	High 4	Moderate 3	Low 2	Very Low 1	Mean
1	Uploading of abstracts of articles (journal articles, conference proceedings and books)	40	38	58	41	13	3.27
2	Uploading of full-text articles (journal articles, conference proceedings, and books)	6	15	69	76	24	2.49
3	Uploading working papers	10	14	35	75	56	2.19
4	Sharing scholarly presentations such as posters and slides	12	6	29	89	54	2.12
5	Sharing links of published articles	8	11	27	86	58	2.08
6	Sharing data underlining my research	15	7	36	47	85	2.05
7	Sharing software codes and technology applications utilised during the research process	10	14	33	46	87	2.02

Source: Field work, 2020

Table 2 reveals that the majority of the respondents (3.27) uploaded their abstracts on academic social media platforms. Abstracts of articles of journals, books, and conference proceedings may have been the most shared research output by respondents as a result of fear of plagiarism and intellectual property rights. This is in disagreement with the findings of Tai and Pieterse (2017) who found out that faculty members in Israel do not upload their abstracts on ASM.

**Table 3: Frequency of Measuring Research Impact**

S/N	Statement	Always	Often	Sometimes	Rarely	Never	Mean
1	I search for information on how often my articles are cited	38	63	51	24	14	3.46
2	I search for information on the frequency of my article view	36	61	50	27	16	3.39
3	I search for feedbacks related to my work	33	47	57	40	13	3.25
4	I monitor the number of full test reads of my articles	30	53	61	25	21	3.24
5	I search for information on researchers who are attracted to my work and the countries they reside	29	47	65	25	24	3.17
6	I keep track of researchers who are interested in my research	37	43	49	34	27	3.15
7	I monitor the number of recommendations my articles receives	31	47	48	35	29	3.08

8	I search for information on the number of bookmarks my articles have received	28	36	55	22	49	2.85
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Source: Fieldwork, 2020

Table 3 reveals that the majority of the respondents measure their research impacts by engaging in various research impacts monitoring activities. It was however observed that the majority of the respondents (mean=3.46) monitor how often their articles are cited by other researchers. Citation count may have generally been the most frequent method respondents utilised for monitoring their research impact may be as a result of the misconception that the quality of research undertaken by a researcher is assessed by the number of citations the work has attracted. The findings are Contrary to the findings of Adetayo (2021) who found out that private universities lecturers in Ogun State do not utilise social media citation tools.

### Conclusion

ASM provides opportunities for LIS educators to disseminate their contribution to knowledge to a wider audience and evaluate the impact of such research findings on stakeholders. The study concludes that the majority of LIS educators do not utilise ASM platforms in disseminating research findings. They use the sites majorly for uploading abstracts of their research work. The findings further revealed that LIS educators frequently monitor their research impact in ASM platforms and citation counts were the major activity they undertake in evaluating research impact.

### Recommendations

The authors recommend that:

1. LIS educators should ensure they patronise various academic social media in disseminating their research findings to facilitate global visibility.
2. LIS educators should ensure they upload full-text articles, working papers, share data, scholarly presentations, and software and codes underlying their research in various ASM platforms to contribute their knowledge in solving societal problems.
3. Higher education administrators should ensure they formulate ASM use policies to promote its use among LISE.

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