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SOCIAL MEDIA AS A COLLABORATIVE TOOL FOR RESEARCH AMONG LIBRARY AND INFORMATION SCIENCE (LIS) PROFESSIONALS IN NIGERIA

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**SOCIAL MEDIA AS A COLLABORATIVE TOOL FOR RESEARCH AMONG
LIBRARY AND INFORMATION SCIENCE (LIS) PROFESSIONALS IN NIGERIA**

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Abstract

The penetrating influence of the internet and information communication technology tools has brought about a boost in communication and interaction of people. Collaborative research is now seen as a key factor in achieving a set goal in any field including the field of library and information science. This study is focused on exploring the use of social media as a tool for collaborative research among librarians in Nigeria. A descriptive survey design was adopted for this study and an electronic questionnaire was used to elicit responses from one hundred and one (101) library and information science (LIS) professionals based on purposive sampling technique. From these responses, the first seven most used Social media platforms for research collaborations were WhatsApp (83%), Email services (74%), Google docs (59%), Google drive (47%), Facebook (46%), Telegram (45%), and Zoom app. (42%). Also, all the respondents agreed that social media platform and tools enable researchers to communicate, network and share documents with many people regardless of locations, at little or no expense (100%), the major challenges identified were differences in basic knowledge on use of available social media applications and low level of ICT skills among LIS professionals. It was recommended that self-development opportunities should be exploited and that LIS professionals should be exposed to online and webinar seminars on application and relevance of social media to collaborative research.

Key words: Social media, Collaborative research, Collaborative tool, Information science professionals.

1.0 Introduction

Teamwork and collaboration have become the vehicles for the integration of knowledge efforts and capabilities for the research process (Andrade, Lopez & Martin, 2009). Collaborative research is becoming a common phenomenon in the academic community and it is now taking a new dimension following the penetration of technologies in the academic domain. Straus and Layton (2002) sees collaboration as a strong and proven tool for solving problems, building consensus, and helping decision-making processes. Abbas (2016) asserted that the “aims of scholarly collaboration was to foster sharing of knowledge, skills and techniques, cross-fertilization of ideas which may generate new insights or perspectives that may not have happened with individuals working alone; provision of intellectuals companionship thus overcoming intellectual isolation; and potentially increase the visibility of the work by each collaborator diffusing the findings either formally or informally”. Adebaye, Okunlaya, Funom and Amalahu (2017) writing about collaboration in the university settings asserted that collaborative authorship whether within the same institution or outside institutions within the same country or outside is understood to be tremendously valuable and highly regarded, as it amalgamates skills, knowledge and resources, allows division of labour and the study of more difficult problems, including interdisciplinary ones.

Nevertheless, collaborative research in any field offers the researchers the opportunities of pooling limited resources together in order to achieve a specific research goal. Tella, Akinboro and Harmed (2012) citing Parnami & Bandyopadhyay, (2008) sees collaboration in research as being broadly used phenomenon for many years, in which the significant factors like time and cost are reduced to a large extent because of sharing of the resources by the parties. Collaborative research contributes to the technological and economical development of the country. Collaborative research as explained by Kishk Anaquot Health Research (2008) involves respecting and understanding the participants and recognizing the knowledge and capabilities of the local people who can work with researchers to obtain analyses and solutions. Collaboration is all about research communication and interaction to achieve a set goal. In today’s digital world, the penetrating influences of Internet and ICT tools have in no small measure transformed the

way and manner with which people interact and communicate. One of such areas is research and one among the various tools having overwhelming influence on both research and other areas of life endeavours is social media.

Social media has drastically changed the way and manner with which people communicate, interact and share ideas at the various spheres of life with academics not exempted from this change propelled as a result of penetration of technologies. No doubt modern information technologies have brought into reality the necessity of adaptation to the fast speed of information sharing, creating and distributing among actors, located in different states or even continents (Anyalebechi, Benson & Onuoha, 2017). Social media tools enable researchers to communicate, network and share documents with many people regardless of locations, and at little or no expense (Hobson & Cook, 2011; Skarzauskiene, Tamosiunaite & Zalieniene, 2013). According to Quadri & Idowu (2014), librarians in Nigerian universities as well as all tertiary institution libraries are now realizing the potentials of social media such as Facebook, Twitter, YouTube, LinkedIn, Skype and Google etc.

In this digital age, information and communication technology is opening up several opportunities for research collaboration. Librarians like other professionals are leveraging social media tools which have already transformed libraries and information service sector. Social media includes web-based and mobile based technologies that are used to turn communication into interactive dialogue among individuals, organizations and communities (Tella, Akinboro and Hammed, 2012; Shuaibu, Jika and Umar, 2016). Social media tools enable library and information science professionals (LISP) to connect, network and share research findings with other researchers irrespective of time and distance (Benson, Amaechi and Onuoha, 2017). Ekere, Akanwa and Benson (2015) pointed out that library and information science professionals should exploit and utilize the diverse platforms of social media because it is an act of aberration for them not to explore them in this globalized society. Librarians should take full advantage of the variety of co-authoring tools made possible by information technologies like Google docs, drive, email, Skype, dropbox etc, for effective author collaboration with professional colleagues outside their institutions (Adegbaye, Okunlaya, Funom and Amalahu, 2017).

This paper is aimed at exploring the use of social media in collaborative research among librarians in Nigeria.

Objectives of the study

- a. Identify social media available for collaboration.
- b. Examine the relevance of social media to collaborative research.
- c. Find out the challenges in adopting social media as a collaborative tool.

Review of Related Literature

Social Media Available for Collaborative Research

There seems to be a plethora of social media available in the social cyberspace. Social media platforms keep emerging on a daily basis, based on the innovation and creativity of the creators. According to Spencer (2019) there are over sixty types of social media, prominent among them are Facebook, WhatsApp, Telegram, YouTube, Twitter, Wikis, Wechat, Qzone, Instagram, Tumblr, Google +, Baidu, Tieba, Skype, Viber, Sina, Weibo, LINE, Snapchat and Blogs, etc. However, different people classified social media based on the disciplines and perspectives. Zohoorian – Fooladi and Abrizah (2012), citing Kaplan and Haenlein (2010), categorized six types of social media: collaborative projects (e.g. Wikipedia, Google docs, Microsoft Teams etc), Blog and microblogs (e.g. Twitter), content communities (e.g. YouTube, Flickr), Social networking sites (e.g. Facebook), virtual game world (e.g. high school library game and the librarian free online game from FUPA) and virtual social world (e.g. second life).

Commenting on types of social media, Xie and Stevenson (2013) aver that there are different variations of social media, and the most popularly applied social media in digital libraries includes blogs, Facebook, photo sharing, podcasts, RSS feeds, Twitter, YouTube and Wikis. Sechaliao (2014) explicitly presents the popular social media that are widely used in higher education as Facebook, YouTube, Twitter, MySpace, LinkedIn, Flickr, Slide-share, Blogs, Wikis and Podcasts.

According to Ottong, Eyo and Ottong (2014), librarians must create blogs where they can interact with their users and also get feedback; have Twitter accounts and Google alerts that enable you to know when your name is mentioned online. SNSs such as LinkedIn, MySpace,

Facebook, Twitter, Blogs as pointed out by Sahoo and Sharma (2015) set up personal communities, allow users to view profiles of their friends which are widely used worldwide.

According to Thanuskodi (2012), the Wiki allows the librarians to determine which content is used most, which can influence the type of content to focus and some libraries have also used podcasts to provide library instructions and information literacy programmes.

Ekere, Akanwa and Benson (2015) highlight few social media that can be effectively utilized by library and information practitioners. These include Facebook, Twitter, Blog and Flickr. According to Aras and Colaklar (2015), the primary social media instruments used in university libraries are Facebook, Twitter, RSS, Blogs, YouTube, and Flickr.

Relevance of Social Media to Collaborative Research

Researchers as noted by Hobson and Cook (2013) can build relationships and keep up to date with people involved in their areas of interest. It encourages discussion, debate and engagement within their community. According to Hidayanto and Setyady (2014), collaborative tools help group activities by providing ease of communication and coordination among members of the group. Onifade, Opele and Adelowo (2015) posit that maximizing social networks in collaboration will give up-to-date information and improve the quality of research outputs. They further stated that it also strengthens research and supports scientific and technological excellence through the integration of existing and emerging research activities and the exchange of knowledge.

European Commission (2003) as cited in Onifade, Opele and Adelowo (2015), contends that collaborative networks promote academic quality by ensuring undue replication of works of others in the same area of research. Also, Gaal, Szabo, Obermayer-Kovacs and Csepregi (n.d.) contend that with social media, we can easily collaborate and work with our colleagues at the opposite side of the world in an effective way. Social interaction via technologies is a powerful way to efficiently organize knowledge (Skarzanskiene, Tamosiunaite & Zalieniene, 2013).

Andrade, Lopez and Martin (2009) citing Bozeman and Corley (2004) found the following as reasons for collaborative research: access to expertise; access to unavailable equipment or resources, encouragement of multi-disciplinary growth, improvement of the

capability to get funds; prestige or visibility achievement; tacit knowledge acquirement about techniques, aggregation of knowledge for managing large and complex problems; productivity, education and training improvement of students and young researchers, increasing science specialization and the pleasure of working with colleagues.

Afolabi and Ipadeola (2017) writing on social media usage asserts that Librarians in Nigerian university libraries are not exempted from this innovation. The use of social media tools by them is becoming more popular, realizing that the technological devices have been useful tools for harvesting ideas, information gathering, knowledge enrichment and putting them at an advantageous edge thereby increasing the chances of their research competitiveness.

According to Benson, Amaechi and Onuoha (2017) researchers in different countries are finding it more interesting to collaborate with fellow professionals in other nations and all these have been made much easier through integration of social media to library services. This is because social media allows researchers to effectively exchange information and ideas. Chuma-Ibe (2017) citing Xu *et al* (2009) reports that social media tools can enable collaboration, offer improved section management through allowing instant communication, and also improve accessibility and integration. Social media platforms allow users to connect, create, promote, share and follow interest groups (Ibrahim, Dang & Dayan, 2017).

Challenges of Adopting Social Media as a Collaborative Tool

As aptly noted by Bukvova (2010), despite the dynamic development of ICT, there are still considerable barriers regarding the use of ICT in research collaborations. Among them are:

- i. **Low level of awareness of collaborative potentials inherent in social media:** There is no doubt that one of the major challenges to effective utilization of social media in collaborative research; especially in developing countries remains the low level of awareness of collaborative potentials inherent in social media. It has been acknowledged that awareness of a thing propels its usage. Therefore, since researchers (librarians) are not fully aware of the collaborative potentials of most of the social media, it has led to a situation of under-utilization of these media by librarians in their research endeavours. Similarly, Quadri and Idowu (2014) in their findings demonstrated that the level of awareness of social media tools among academic librarians in Nigeria directly affected the level of adoption and usage of these social media tools.

Chuma- Ibe (2017) noted that majority of libraries in developing countries are either not aware of the benefits inherent in use of social media and its adaptability to the work schedules of staff in libraries

ii. **Lack of time:** Benson, Amaechi and Onuoha (2017) sees time constraint as one of the challenges to effective utilization of social media tools in promoting research among library and information science professionals. They observed that library and information science professional involvement in other academic activities in tertiary institutions would require time to maximally utilize social media tools.

iii. **Differences in knowledge and use of available Social media platforms:** According to Benson, Amaechi and Onuoha (2017), when the basic knowledge of social media applications is not in place, there would be limits to the extent social media can be used to promote research. As noted by Akerele, Egunjobi, Awoyemi and Falade (2017), social media sites are everywhere and what is needed to use them maximally is good knowledge and willingness to surmount some challenges.

iv. **Differences in research areas of interest:** The difference in librarians' areas of research interest also affects the use of social media in collaborative research. When librarians' areas of interest differ, it will affect their tendency to apply social media to collaborate effectively. No doubt, it will be much easier to participate in collaborative research in one's area of interest than in areas that one lacks in-depth understanding and zeal to work on.

v. **Differences in knowledge and use of social media platforms:** beyond the awareness of social media, differences in knowledge and use of social media limit the extent of its usage in collaborative research. Most librarians may be skillful in using one particular social media that a fellow librarian may not be conversant with, in such a situation, there is no doubt that effective collaboration will be hindered.

vi. **Level of ICT literacy among librarians:** Possessing ICT literacy is the gateway to effective utilization and application of social media to research activities. Evidences abound of low ICT literacy among librarians.

Benefits of Adopting Social Media for Collaboration

Social media can be seen as an effective outreach tool, helping librarians to promote the work of their faculty and connect more deeply with the broader library community. This will in

essence help bring a closer relationship between the librarians and their users. Abbas (2016) citing Katz and Martin (1997) outline advantages of collaboration to include sharing of knowledge, skills and techniques, transfer of knowledge or skills especially tacit knowledge, cross-fertilization of ideas which may generate new insights or perspectives which may not have happened with individuals working alone, provision of intellectual companionship thus overcoming intellectual isolation and potentially increase the visibility of the work by each collaborator diffusing the findings either formally or informally.

Adegbaye, Okunlaya, Funom & Amalahu (2017) aptly pointed out that the benefits of collaborative authorship include but, not limited to improving the quality of a written work by bringing together people with complementary areas of expertise and also, the possibility of partners enhancing their writings. As pointed by Keraminiyase, Amaratunga and Haigh (2008), the benefits of research collaboration may differ from one partner (a partner in this context is a party who is functionally related to other parties within research collaboration to another). Ogunjiobi and Fagbola (2017) contend that researchers have a huge amount to gain from using social media in various aspects of their work. Social media to them provide researchers varieties of tools that researchers need to use and disseminate information. According to Aftab and Naushad Ali (2018), the following benefits can be derived from using social media and social networking sites for collaborative research:

1. Creates room for professional interaction
2. Paves way for exchange of ideas
3. Knowledge and experience
4. Lets' us know about what's happening in LIS field in other institutions
5. Creates opportunity for improvement of profession
6. Platform to gain support for initiatives
7. Helps in professional improvement of an individual.
8. It can be used for outreach activities through onward sharing, well beyond the institution itself, helping to build connections and reputation more broadly.

Methodology

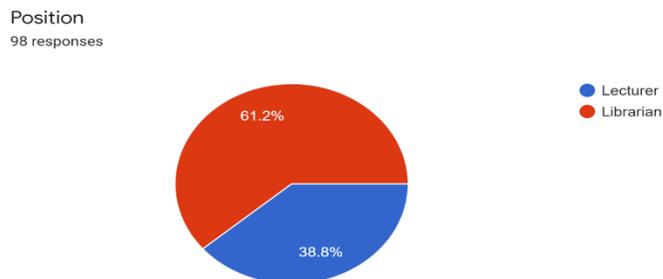
The study population is Library and Information Science professionals in Nigeria. The descriptive survey design was adopted for the study. Due to the outbreak of COVID 19 during the administration of this survey study, electronic questionnaire was used to elicit responses from the population with a purposive sampling method. One hundred and one 101 responses were received from librarians and lecturers from across the country accessing them on various professional Whatsapp platforms and e-mails. The questionnaire was generated on Google forms to collect data based on three research questions formulated in line with the objectives of the study. The generated data was analyzed using simple frequencies counts and percentages and presented in charts and tables.

Analysis

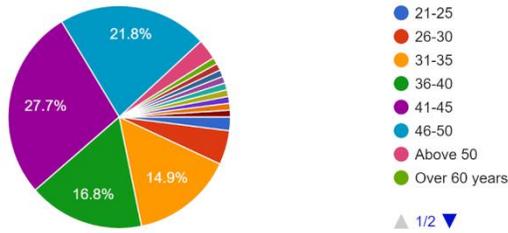
Demographic characteristics

Chart 1 below reveals the Demographic characteristics of respondents. Majority of the respondents were librarians (62.0%) with highest age brackets of 41-45 (27.7%) and females were the majority of the respondents (54.5%) while Master degree holders were the highest qualification of respondents (52.5%).

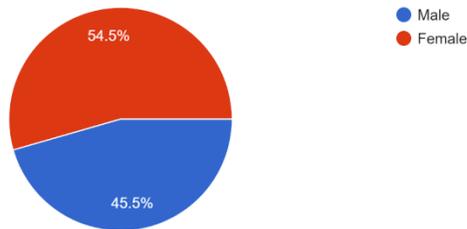
Chart 1 Demographic characteristics of respondents



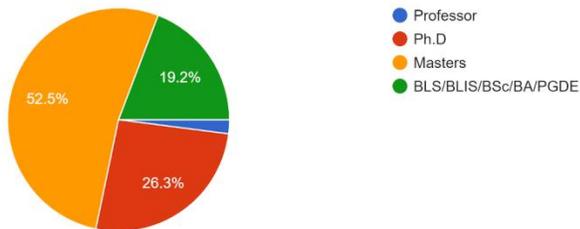
Age Bracket (years)
101 responses



Gender
101 responses



Qualification
99 responses

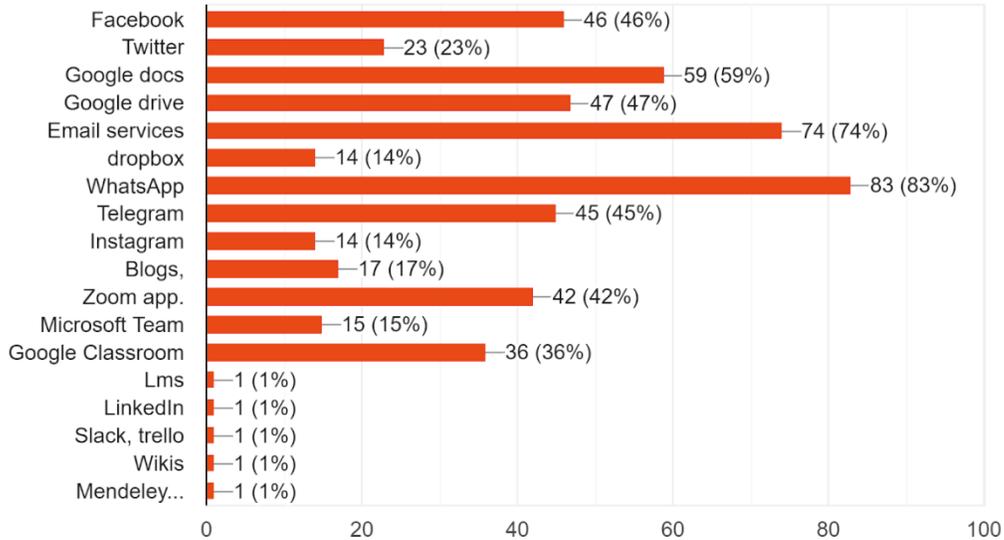


Research question one: What are the social media platforms used for research collaborations

Chart 2 below revealed the Social media platforms used for research collaborations, the first seven most used Social media platforms for research collaborations as revealed by the respondents were WhatsApp (83%), Email services (74%), Google docs (59%), Google drive (47%), Facebook (46%), Telegram (45%), and Zoom app. (42%).

Chart 2 Social media platforms used for research collaborations.

100 responses



Research question two: What is the relevance of social media platforms or tools to collaborative research?

Table 1 below reveals the relevance of social media platforms or tools to collaborative research, from the table all the respondent agreed that social media platform and tools enable researchers to communicate, network and share documents with many people regardless of locations, at little or no expense (100%), while majority also agreed that social media platform and tools are useful for harvesting ideas, information gathering, and knowledge enrichment (99.0%). However, respondents disagreed that social media platforms and tools prevent undue replication of works of others and enhances access to expert opinion on a research area of interest (16.8%).

Table 1 Distribution of the relevance of social media platforms or tools to collaborative research

S/No	Statement	Agreed	Disagreed
1	Enable researchers to communicate, network and share documents with many people regardless of locations, at little or no expense	101 (100%)	-
2	Useful for harvesting ideas, information gathering, and knowledge enrichment	100 (99.0%)	1 (1.0%)
3	Encourage discussion, debate and engagement within the academic community.	99 (98.0%)	2 (2.0%)
4	Promote the integration of existing and emerging research activities, support scientific and technological excellence and exchange of knowledge.	99 (98.0%)	2 (2.0%)
5	Help in building consensus, enhance decision-making, give up-to-date information, improve research processes and the quality of research outputs.	98 (97.0%)	3 (3.0%)
6	Promote and encourage multi-disciplinary growth in Library and Information Science profession	98 (97.0%)	3 (3.0%)
7	Ease work with our colleagues on the other side of the globe in an effective and organized way.	98 (97.0%)	3 (3.0%)

8	Potentially increase the visibility of the work by each collaborator in their field of interest.	98 (97.0%)	3 (3.0%)
9	Increase research specialization and the pleasure of working with colleagues	97 (96.0%)	4 (4.0%)
10	Provide opportunities for pulling limited resources together in order to reduce or share the cost of research processes.	96 (95.0%)	5 (5.0%)
11	Allow the division of labour in complementary areas of expertise among collaborators.	94 (93.1%)	7 (6.9%)
12	Prevent undue replication of works of others and enhances access to expert opinion on a research area of interest.	84 (83.2%)	17 (16.8%)

Research question three: What are the challenges in adopting social media as a collaborative tool?

Table 2 below reveals the challenges in adopting social media as a collaborative tool. Majority of the respondent agreed that differences in basic knowledge and use of available social media applications and platforms among librarians limit the extent of using social media for research collaboration (84.8%) and Low Level of ICT skills among librarians limit use of social media for research collaboration (80.2%). However, the majority of the respondents disagreed that Use of social media for research collaboration is limited among librarians due to differences in research areas of interest (59.4%).

Table 2 Distribution of challenges in adopting social media as a collaborative tool

S/No	Statement	Agreed	Disagreed
1	Differences in basic knowledge and use of available social media applications and platform among librarians limit the extent of using social media for research collaboration	85 (84.8%)	16 (15.2)
2	Low Level of ICT skills among librarians limit use of social media for research collaboration	81 (80.2%)	20 (19.8)
3	Preference and expertise in the use of dis-similar social media platforms among librarians may hinder the use of social media for research collaboration	68 (67.4%)	33 (32.6)
4	Low level of awareness of collaborative potentials inherent in social media applications and platforms	67 (67.3%)	34 (33.7%)
5	Inadequate time to use social media platform for research collaboration due to librarians involvement in other academic activities in tertiary institutions	50 (49.6%)	51 (50.4%)
6	Use of social media for research collaboration is limited among librarians due to differences in research areas of interest	41 (39.6%)	60 (59.4%)

Discussion of Findings and Recommendations

The general objective of the study is to investigate the use of social media in collaborative research among library and information science professionals in Nigeria. To achieve this general objective, some specific objectives were formulated and part of the specific objective is to identify the Social media platforms used for research collaborations, the first seven most used Social media platforms for research collaborations as revealed by the respondents were WhatsApp (83%), Email services (74%), Google docs (59%), Google drive (47%), Facebook (46%), Telegram (45%), and Zoom app. (42%). This affirmed the finding of Quadri & Idowu (2014), that librarians in Nigerian universities as well as all tertiary institution libraries are now realizing the potentials of social media such as Facebook, Twitter, YouTube, LinkedIn, Skype and Google etc. however, the findings negated the study of Sechaliao (2014) who presented the popular social media that are widely used in higher education as Facebook, YouTube, Twitter, MySpace, LinkedIn, Flickr, Slide-share, Blogs, Wikis and Podcast. And also the findings of Aras and Colaklar (2015), who identified the primary social media instruments used in university libraries as Facebook, Twitter, RSS, Blogs, YouTube, and Flickr.

Research question two established the relevance of social media platforms or tools to collaborative research, from the table all the respondent agreed that social media platform and tools enable researchers to communicate, network and share documents with many people regardless of locations, at little or no expense (100%), and majority also agreed that social media platform and tools are useful for harvesting ideas, information gathering, and knowledge enrichment (99.0%). This finding is supported by Abbas (2016) asserted that the aim of scholarly collaboration was to foster sharing of knowledge, skills and techniques, cross-fertilization of ideas which may generate new insights or perspectives that may not have happened with individuals working alone. The finding is also strongly corroborated by Hobson & Cook, 2011; Skarzauskiene, Tamosiunaite & Zaleniene, 2013 with assertion that Social media tools enable researchers to communicate, network and share documents with many people regardless of locations, and at little or no expense. However, the study established that respondents disagreed that social media platforms and tools prevent undue replication of works of others and enhances access to expert opinion on a research area of interest (16.8%). This finding contradicted the

finding of Onifade, Opele and Adelowo (2015), that collaborative networks promote academic quality by ensuring undue replication of works of others in the same area of research.

Furthermore, research question three affirmed the challenges in adopting social media as a collaborative tool. Majority of the respondent agreed that differences in basic knowledge and use of available social media applications and platform among librarians limit the extent of using social media for research collaboration (84.8%) this is supported by Benson, Amaechi and Onuoha (2017), when the basic knowledge of social media applications is not in place, there would be limits to the extent social media can be used to promote research. As noted by Akerele, Egunjobi, Awoyemi and Falade (2017), social media sites are everywhere and what is needed to use them maximally is good knowledge and willingness to surmount some challenges. And also the study established Low Level of ICT skills among librarians limit use of social media for research collaboration (80.2%).

However, the majority of the respondents disagreed that use of social media for research collaboration is limited among librarians due to differences in research areas of interest (59.4%).

Recommendations

The following recommendations are hereby put forward in line with the study:

a. **Exploration of self-development opportunities:** Osuchukwu (2016) posits that aligning with groups of professional development platforms will put one on the right truck to match the innovations of current professional ideologies. In her view, professionals that refused to learn and unlearn in the 21st century become redundant, irrelevant and overtaken knowledge, skills and expertise by others. Benson, Amaechi, Onuoha and Enem (2017) suggest that librarian should be adequately sensitized on various self-development opportunities available to them. They further suggest that librarians should explore web based conferencing as this will help solve the challenge of lack of funding for self-development.

b. **Organizing practical-based research conferences:** Effort should be made to organize research conferences for library and information professionals as this will help to equip them with practical skills on the application of social media and other ICT related tools to research and collaborative activities.

c. Exposing librarians to online and webinar seminars on application of social media to collaborative research: Library and information professionals should be exposed to online webinar seminars on the application of social media to collaborative research. There are many opportunities for librarians to explore in the online environment. Librarians can draw the attention of fellow librarians to online and webinar seminars relating to research collaboration and social media.

d. Creating awareness on relevance of social media to collaborative research: There should be intensive awareness on the application of social media to collaborative research. Sensitization of librarians on relevance and application of social media to collaborative research is a necessity in this digital age.

Conclusion

Social media is becoming popular in the academic domain and among researchers with its inherent potentials of enabling researchers to communicate and interact irrespective of space, time and environment. One could argue that social media is an effective tool for collaborative activities especially research. Though the popularity and relevance of social media to research collaboration cannot be said to be without challenges, it is on this strength that exploration of self-development opportunities, organizing of practical-based research conferences, exposing of librarians to online and webinar seminars on application of social media to collaborative research and creating awareness on relevance of social media to collaborative research.

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