Influence of Use of Social Media on Research Productivity of Lecturers in Two Selected Universities in South-West Nigeria

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Abstract:

Purpose: *This study investigated the influence of use of social media on research productivity of lecturers in two selected universities in south-west Nigeria.*

Design/Methodology/Approach: *The study adopted a survey research design and sampled a total of 194 lecturers at the University of Ibadan and Tai Solarin University of Education. Multi-stage sampling technique was used. Questionnaire was administered and 161 were retrieved but only 154 were properly filled and used for the analysis. Data collected were analysed using simple percentage, frequency counts, means, and standard deviation. Hypothesis was tested using inferential statistics.*

Findings: *The study found that social media use had no significant influence on research productivity of the lecturers in universities in south-west Nigeria.*

Originality/Value: *the study recommended that conferences and workshops should be organized for university lecturers at all levels on how to integrate social media tools, platforms, and other internet tools into their academic/research work. It also recommended that there should be institutional support for the use of social media for academic/research purpose with a clear policy in place regarding their use for academic/research purposes.*

Implication: *The findings of the study might boost/increase the research productivity of the lecturers.*

Keywords: *Influence, Use of Social Media, Research Productivity, University Lecturers, Nigeria*

Introduction

The three basic functions of lecturer's institutions of higher learning are teaching, research, and community service. Ajayi (1997) referred to them as "three canons of academic". Nirman (2007) as cited in Uluocha and Mabawonku (2014) also posits that the mission of higher education (especially universities) is to advance knowledge, create knowledge, disseminate knowledge through research and provide service to the community. According to Bako (2005) research production (of academic staff) has become essential for university success as well as prospects of promotion of academics. Lecturers are therefore expected to conduct research and publish (as publication is one of the major avenue for disseminating the research productivity of academics) their findings in order to stay relevant, and enjoy continuous promotion and tenure within the academic community. According to Sharobeam and Howard (2002) the number of publications has often been used by administration in institutions to judge academics research productivity.

There is a growing awareness and use of social media in virtually all facets of life including academic parlance. Consequently, scholars and researchers are beginning to turn to and integrate them for easy access to current scholarly journals, current news, up-to-date information, reputable sources, effectiveness and efficiency, as well as for collaboration. Social media such as Facebook, LinkedIn, Academia, ResearchID, Twitter, Scribd, Research Gate, Linkedln, Wikis, Skype, etc. have not only affected the way we communicate and socialize, they have also permeated professional interaction and scientific ones (Darling, 2013). Owing to this growing adoption of social media in the general public, institutions of learning are also adopting the tools for teaching and learning as well as for research activities. This study seeks to investigate the influence of use of social media on research productivity of lecturers in two selected universities in South West Nigeria.

Statement of the Problem

Past studies revealed that social media could be useful for teaching and researching. While some of these studies are carried out on social media use by students and faculty members, others are on why lecturers might want to use social media to support their teaching, and how specific social media tools like Facebook, YouTube, twitter and so on, are used for teaching and researching. Others yet have shown that ICT, internet and internet resources could enhance collaboration and research productivity. However, not much is known about how social media influence research productivity of lecturers especially in universities in South west Nigeria. Therefore, it is imperative to investigate the influence of social media on research productivity of lecturers. The problem of this study therefore is "what influence do social media have on research productivity of lecturers in universities in South west Nigeria?"

Objectives of the Study

The specific objectives of this study are to:

1. Find out if there is any significant influence of social media on research productivity of lecturers in universities in south-west Nigerian
2. determine which of the social media influence research productivity most
3. find out which aspect(s) of research productivity is/are influenced most by social media
4. examine the challenges faced by lecturers in universities in South west Nigeria in using social media for research.

Hypothesis

H_{O1}: Social media use will not significantly influence research productivity of lecturers in universities in South-west Nigeria.

Literature Review

Use of Social Media for Research

The term "social media" or a "social networking sites (SNSs)" has been defined by different scholars. For instance, Boyd and Elision (2007) defined if as "web–based services that allow individual (1) to construct a possible or semi-possible profile within a bounded system, (2) to articulate a list of other users with whom they share a connection, and (3) to view and traverse their list of connections and those made by others within the system". Another definition of social media is, " a group of internet-based application that build on the ideological and technological foundation of web 2.0, and that allow the creation and exchange of user-generated content" (Sechaliao, 2014; Calvi & Cassella, 2013; Chen, 2013; Hamid, Wayeott, Kurnia, and Chang, 2014; Al-Badi, AlHinas, Sharma, and Williams, 2013).

The explosive growth of social media, also referred to as social networking sites (SNSs), influenced by the free access for whoever desires to use, has led to a major change in the communication of knowledge and conduct of research. Nentwich and Konig (2014) submit that social network sites have become central to the internet and that several sites geared specifically toward researchers have been created. They opined further that social media are increasingly offering new opportunities for scholars and researchers to connect and communicate with one another. Koh, Risam, Drew, Czerniewicz and Whitley (2013) also reported that scholars are increasingly moving their work to web, making conversations that previously took place within campus walls to become open for the world to pitch in. According to Nicholas and Rowlands (2011), social media impact on all points of the research cycle from identifying research opportunities to dissemination of findings at the end. Their use in research cut across planning researching preserving, publishing and distributing and it is changing the way researchers and scholars communicate with each other, collaborate, promote their research, and debate. Social media provide new forms of collaboration that are not bound by time, space and funding. They provide a kind of academic correspondence that offer a more manageable way to stay in touch with a wide variety of researchers of similar interest, and offers tools which can facilitate one of the important tasks that researchers do of locating, using and disseminating information (Cann, 2011).

The use of social media in research ranges from talking about work, papers read, and laboratories activities, as well as using Twitter to collect and share stories and resources with colleagues (Rowan, 2011), collaborative writing, conferencing, sharing images, and other related activities(Howard, 2011), collaboration and scholarly communication (Macmillan, 2012; Gu and Widen-Wulff, 2011), gathering of data on human behaviour, thoughts, social interactions, etc. (Megan 2014), and as a cost-effective and

in-depth tool for gaining insights into customers, market, brand appearance, and other important market research aspects(Nelson, 2013). Calvi and Cassella (2013) carried out a study on scholarship 2.0 in order to analyse scholars' use of web 2.0 tools in research and teaching activities in Netherlands. They found that the frequent use of social media is rare, and only the use of LinkedIn is significant. The study also found out that Wikipedia is by now a well-established and reputable reference resource, and that blogs are used for different purposes in the research lifecycle ranging from disseminating research results, to identify research opportunities, and collaboration to review the literature, and to collect research data.

Studies have revealed various purposes why academic staff might want to use social media. In a survey conducted by Tyagi (2012) on adoption of web 2.0 technology in higher education, the findings of the study revealed that the majority of faculty members have been using web 2.0 tools for three major purposes namely: for web based teaching and research; for interactive learning features; and to keep themselves up to date on related type of interest. Although, the study also revealed that application of web 2.0 tools in India higher education is still marginal and will have to overcome obstacles in order to hold its ground.

Ponte and Simon (2011) carried out another survey that aimed at gauging the potential acceptance of a collaborative and web 2.0 inspired scholarly communication sectors. The study revealed that academics are using social media for research. It was found that 99.7% of respondents used search engines, in their research, 56.5% used citation indexing initiatives, 42% used wikis, 38.6% used blogs, and 34.8% used social networking sites. The study however reported the challenges of combining free dissemination of results with robust and reliable quality control mechanisms. Some researchers also reported that traditional research materials are being used with social media.

Tenopir and Volentine (2013) in their own study on social media and scholarly reading, found that most UK academic use one or more forms of social media for work-related purposes, although frequency of use and creation is not as high as might be expected. Another major survey with a lot of findings on use of social media for research is that of Nicholas and Rowlands (2011) who came up with a lot of findings such as: social media impacts on all points of the research cycle from identifying research opportunities to dissemination of findings at the end; the three most popular social media tools in a research settings are those for collaborative authoring, conferencing, and scheduling meetings; the most used social media tools in a professional research context tend to be mainstream anchor technologies like Skype, Twitter etc. The study also found that awareness of social media amongst members of the research community is high, but the actual use is low; that some disciplines like arts and humanities are less likely to use social media; that age is a poor predictor of social media use in research; and that the traditional channels of dissemination such as journals, conference proceedings, and edited books are much preferred over the informal channels such as blog.

Another study by Mini Devi and Yameena (2015) on science communication through social networking sites found that all the respondents (n=153) depend on social media to identify research opportunities. Findings from the study revealed further that scientists use social media to secure support, review the literature, collect the research data, analyse the research data, and manage the research process. A study conducted by Chen and DesArmo (2015) on connecting the online conversation: scientists and academic social networks, they found that few of the scientists are using the academic social networks. They also revealed that senior scientists are more likely to use the social networks than junior scientists, as those with PhDs over those with only a master's degree.

Elsayed (2015) also conducted a study on the use of academic social networks among Arab researchers. The study showed that three-quarters of the respondents use academic social networks to share publication, and that most researchers subscribed to more than one social networks of which ResearchGate was the most frequently used. The study of Wilkinson and Weitkamp (2013) on environmental researchers' use of traditional and social media for dissemination showed that 47% of researchers surveyed made contacts with other researchers as a result of their social network use. The study however revealed that few researchers were actively using social media to disseminate their research findings, with many still relying on academic journals and face-to-face

communication to reach both academic and public audience.

Findings from the study of Simisaye (2014) on awareness and utilization of social media for research among faculty staff of Tai Solarin University of education, Ogun State, Nigeria also reveal that faculty staffs use social media for research-related activities such as to communicate research output, upload research paper, and download research works. Other reasons are to advertise conferences, seminars, and to link up with other researchers from any part of the globe.

In another survey by BioInformatics LLC (2007) on scientists' use of social media, the trends found are that 77% of life scientists participate in some type of social media; 50% see blogs, discussion groups, online communities, and social networking as beneficial to sharing ideas with colleagues; 85% see social media affecting their decision-making. They also found that discussion groups and message boards are still the most-used types of sites, but online communities are gaining fast; and that user-generated content is not completely trusted for product information, but it is more trusted than information in printed trade magazines, editorial websites, or online portals.

Influence of use of social media on research productivity

Literature shows that, just like other internet technologies, the use of social media could have an influence on research productivity of lecturers. Abu Seman (2014) shows that the use of social networking sites has a significant relationship with work. Several other studies have also been carried on how social networking sites influence employee and they have discovered that there could be an influence. For example, in a study that was carried out by university of Melbourne, the study showed that people who use social media at work are about 9 percent more productive than those who do not (Coker, 2009; Benjamin, 2012).

The results of the study carried out by Ipsos Public Affairs (2015) on behalf of Microsoft of 9,908 employees across 32 countries, show that nearly half (46%) of information workers, using social tools have increased their productivity, while less than one in ten (9%) say these tools have reduced their efficiency. In addition to bolstering productivity, two in five respondents (42%) report that social tools have resulted in more workplace collaboration. This study further reveals that 56 per cent of respondents from Latin America indicated that the use of social tools has increased productivity, and 62 per cent of the same respondent credited there tools with greater collaboration in the workplace. The findings also show that in Asia pacific, 60 per cent said the use of social tools has increased productivity, while 51 per cent credited these tools with greater collaboration in the workplace. Finally, in Europe, 37 per cent said the use of social tools has increased productivity while 29 per cent credited these tools with greater collaboration in the workplace.

In a study conducted by Ehikhamenor (2003) on internet resource and productivity in scientific research that explores the impact of the internet on the scientific communication process and the productivity of the scientists in Nigeria University, the results show that, while there is a correlation between the number of contacts maintained by the scientists and their productivity, the internet contributes little to increasing those contacts or improving productivity. On the other hand however, Maglalang (2002) also reported that the use of internet is significantly correlated to scientific productivity in the area of kind of information sought; inferring that specific internet sites (such as social media) are important to scientists' productive work.

Similarly, Ogbenevwogaga and Ogbenvwogaga (2006) carried out a study on the impact of the internet on research in Delta state university Nigeria. The study shows that the internet has contributed significantly to the ease of research of the academic staff of the university. 68 (97.1%) out of the 70 academic staff used for the study strongly attested to the fact that internet has made research work easier for them, and hence has brought about research productivity. Findings from the study also reveal that 58 (82.9%) of the respondents reported that the use of internet has created great impact on their research work. Among the most important usage of internet to research, as reported by the respondents, are: quick access to academic materials, ease of communication, access to relevant and up-to-date information.

Besides, the use of social media has been shown to enhance research collaboration among researchers across the world. (Macmillan, 2012; Gu and Widen-wulff, 2011, Howard, 2011). Studies (Lee and Bozeman, 2005; Puljak and

Vari, 2014; Abramo, Dangelo and Di Costa, 2009; Adams, Black, Clemmons, Paula and Stephens, 2005; Centre for International Higher Education, 2015) have also shown that research productivity is strongly correlated with research collaboration. Perhaps, the use of social media (which has been shown to enhance collaboration) could also influence research productivity.

Bastos (2015) carried out a study that evaluated the interplay between scholarly social networking and academic output. The results partially support the hypothesis that activity in scholarly network is associated with academic output.Persson and Svenningsson (2016) in another study on awareness of the professional use of social media among LiU researchers, it was found that the use of social media was not significant; only a small number saw the potential. They also reported that researchers often used Twitter or scholarly social media platforms like ResearchGate or a combination of both. Their study revealed that the most common purpose the surveyed researchers gave for using social media was to monitor their field by following other researchers and to find interesting articles.

Al-Aufi and Fulton (2014) carried out a study on use of social networking tools for scholarly communication in humanities and social sciences disciplines. Findings from the study indicated progressive use of social networking tools for informal scholarly communication. The study also revealed that there is perceived usefulness on the impact of social networking tools on the pattern of informal scholarly communication.

Furthermore, studies show that social media could have influence on teaching activities. Lertputtarak (2008) also found that there is a strong relationship between teaching activities and research productivity (this is because research productivity develops knowledge and reinforces many of the same skills that are required for effective teaching, including the ability to organize one's thoughts and to communicate well, as well as introduction of new topics and methodologies), it is therefore logical to conclude that social media will also influence research productivity.

Studies have also revealed some of the challenges that could be encountered by faculty members in their attempt to use social media especially for academic purposes including for carrying out research. In a study carried out on the use of internet-based social media as a tool in enhancing student's learning experiences in Biological sciences, Beltran-Cruz and Cruz (2013) found that research and study, entertainment, and advertisement were among the reasons students use social media. The findings of Simisaye (2014) also show that major challenges faculty members have with the use of social media for research are issues of privacy, untrustworthiness of some information on social media on social media, and banality. Calvi and Cassella (2013) in their study found that lack of time, lack of expertise and privacy are not among the challenges of using social media for research.

In another study on factors for successful use of social networking sites in higher education by Schlenkrich and Sewry (2012), they also found that lack of privacy, social and network security, legal and regulatory matters are among the challenges of using social media. They also mentioned information quality and lack of cultural barriers. Also, Al-Badi et al. (2013) in their own study on usage of social networking tools in research and collaboration found that time concerns, privacy concerns, as well as security concerns were among the three challenges preventing of using social networking sites as reported by respondents.

Protecter et al. (2010) revealed that lack of skills necessary to make use of the new services is among the challenges in the use of social networking sites. Their study also shows that local formal and informal support for adoption of the internet technology constitutes another major challenge. Calvi and Cassella (2013) in their study on analysing scholars' use of web 2.0 tools in research and teaching activity found that lack of time, lack of expertise and privacy are not among the challenges of using social media for research.

Research Methodology

Survey research design was adopted for this study. The study population is made up of lecturers in two selected universities in south west Nigeria namely Tai Solarin University of Education (TASUED) and University of Ibadan. Multi-stage sampling technique was used to select lecturers from similar faculties (Science, Agric., and Art) and from similar departments (Agric.Econs. Animal Science, Agric.& Fisheries, Mathematics, Chemistry, Computer Science, English, Philosophy, and Religious

Studies). Questionnaire was used to collect data from the respondents. A total of one hundred and ninety-four (194) copies of questionnaire were administered to the faculty members in their offices and in the E-library of TASUED by the researcher; and thereafter collected. Data collected were analysed using descriptive statistics, such as mean, standard deviations and variance, while the hypothesis was tested with Pearson correlation coefficient.

Results

Table 1: Academic Staff Selected for the Study

S/N	UNIVERSITY	FACULTY	DEPARTMENT	POPULATION OF LECTURERS	SAMPLE SIZE OF 60%
1	University of Ibadan	AGRIC &FORESTRY	Agric Economics	20	12
			Animal Science	31	18
			Agric& Fisheries	18	11
		SCIENCE	Depart. of Maths	24	14
			Dept. of Comp. Sci.	25	15
			Dept. of Chemistry.	45	27
		ARTS	Dept. of English	27	16
			Dept. of Philosophy	19	11
			Dept. of Rel. Studies	19	11
2	Tai Solarin College of Education	COSIT	Agric. Science	21	13
		COSIT	Dept. of Mathematics	15	9
			Dept. of Comp. Sci	14	8
			Dept. of Chemistry Educ.	19	11
		COHUM	Dept. of English	13	8
			Dept. of Philosophy	7	4
			Dept. of Rel. studies	8	5
	Total			**325**	**193**

The demographic profile of the respondents revealed that 118 (76.6%) of the respondents were male and l36 (23.4%) were female. The ages of the respondents were from 41-50 (37.7%). This is followed by 31-40 (31.2%). Half of the respondents 70(45.5%) was doctoral degree, followed by Master's degree holders 68(44.2%). 53(34.4%) of the respondents had been working in the university for 6 to 10 years while 40(26.0%) had been working for 1 to 5 years.

Research Question One: Is there any significant joint influence of social media on research productivity of lecturers in universities in south-west Nigerian?

Table 2: Joint Influence of Social Media on Research Productivity

R	R square	Adjusted R square	F	Sig
.551 [a]	.304	.199	2.902	.000[a]

There is significant joint influence of social media on research productivity of the lecturers surveyed. The R value 0.551 has an adjusted R^2 0.199 which indicates that 19.9% of the variance in lecturers' productivity is as a result of the social media. The F-value, 2.902, which is significant at 0.05, shows that the effect is significant.

Research Question Two: Which of the social media influence research productivity most?

Table 3: Relationship between Social Media Use and Research Productivity of the Respondents

Model	Beta	T	Sig
Facebook	.313	3.507	.000
YouTube	-.155	-1.556	.001
Twitter	-.214	-1.898	.122
Scribd	-.247	-2.037	.060
Academia	.014	.128	.044
Linkedin	-.004	-.040	.899
Schoology	-.021	-.173	.968
Research Gate	-.149	-1.335	.863
Flickr	-.326	-2.476	.184
Blogger	.613	4.139	.015
MySpace	-.376	-2.717	.000
Skype	.127	1.342	.007
Loop	.108	.823	.182
Graduate Junction	-.090	-.718	.412
Wikis	.049	.391	.474
Social Bookmarking	.068	.565	.696
Google^{+}	.052	.439	.573
Citation sharing	-.079	-.617	.661
Nature Network	.163	1.684	.538
Research ID	-.027	-.216	.829

The beta values .613 for Blogger, -.376 for MySpace, -.326 for Flick, .313 for Facebook, -.247 for Scribd, -.214 for Twitter, .163 for NatureNetwork, and .127 for Skype, influenced most the research productivity of the lecturers in the two selected universities. This indicates that the research productivity of lecturers was influenced most by Blogger, followed by MySpace, followed by Flickr, followed by Facebook, followed by Scribd, followed by Twitter, and followed by NatureNetwork. In all, Blogger, Facebook, NatureNetwork, and Skype had positive influence on research productivity of lecturers while MySpace, Flickr, Scribd, and Twitter had negative influence on research productivity of the lecturers surveyed. Those with level of significance less than 0.05 (Facebook, YouTube, Academia, Blogger, MySpace, and Skype) had significant influence on lecturers' research productivity.

Research Question Three: Which aspects of research productivity are influenced most by social media?

Table 4: Aspects of Research Productivity Influenced Most by Social Media

Research Productivity		Use of social media
	Pearson Correlation	
	Sig (z-tailed)	
	N	
Textbook publishing (local)	Pearson Correlation	-.102
	Sig (z-tailed)	.207
	N	154
Textbook publishing (International	Pearson Correlation	-.01
	Sig (z-tailed)	.207
	N	154
Chapters in books (local)	Pearson Correlation	.002
	Sig (z-tailed)	.984
	N	154
Chapters in books(international)	Pearson Correlation	.019
	Sig (z-tailed)	.813
	N	154
Occasional papers (local)	Pearson Correlation	-.160*
	Sig (z-tailed)	.040
	N	154
Occasional papers (International)	Pearson Correlation	-.062
	Sig (z-tailed)	.446
	N	154
Publication in learned journals (local)	Pearson Correlation	-.218**
	Sig (z-tailed)	.007
	N	154
Publication in learned journals (International)	Pearson Correlation	-.043
	Sig (z-tailed)	.601
	N	154
Technical report (local)	Pearson Correlation	.036
	Sig (z-tailed)	.654
	N	154
Technical report (International)	Pearson Correlation	.044
	Sig (z-tailed)	.591
	N	154
Scientific peer-Reviewed Bulleting (local)	Pearson Correlation	.129
	Sig (z-tailed)	.110
	N	154
Scientific peer-Reviewed Bulleting (International)	Pearson Correlation	.060
	Sig (z-tailed)	.463
	N	154
Working papers (local)	Pearson Correlation	.016
	Sig (z-tailed)	.846
	N	154
Working papers (International)	Pearson Correlation	.042
	Sig (z-tailed)	.609
	N	154
Patent and Certified invention (local)	Pearson Correlation	-.035
	Sig (z-tailed)	.671
	N	154
Patent and Certified invention	Pearson Correlation	.045
	Sig (z-tailed)	.583
	N	154
0ngoing Research (local)	Pearson Correlation	.003
	Sig (z-tailed)	.968
	N	154
Ongoing Research (international)	Pearson Correlation	.127
	Sig (z-tailed)	.116
	N	154
Seminar papers (local)	Pearson Correlation	.061
	Sig (z-tailed)	.449
	N	154
Seminar papers (International)	Pearson Correlation	.142
	Sig (z-tailed)	.078
	N	154
Workshop papers (local)	Pearson Correlation	-.023
	Sig (z-tailed)	.781
	N	154
Workshop papers (International)	Pearson Correlation	.012
	Sig (z-tailed)	.878
	N	154
Conference papers (local)	Pearson Correlation	-.191*
	Sig (z-tailed)	.017
	N	154
Conference papers (International)	Pearson Correlation	-.075
	Sig (z-tailed)	.354
	N	154

The findings on table 4 revealed that the lecturers' productivity that social media influenced most were publications in learned journals (-.218), conference papers (-.191), occasional papers (-.160), textbook publishing (-.102), and scientific peer-reviewed bulletin (.129) on the local level. On the international level, ongoing research (.127) and seminar papers constitute the ones that were influenced most by the use of social media. While the use of social media influenced local publications in learned journals, conference papers, occasional papers, and textbook publishing negatively, seminar papers, scientific peer-reviewed bulletin, and ongoing research were positively influenced.

The study also showed that textbook publishing (.207), chapters in books (.984), ongoing research (.968), patent and certified inventions (.671), technical reports (.654), scientific peer-reviewed bulletin (.110), working papers (.609), seminar papers (.449), and workshop papers (.781) are the ones significant locally. On the international level however, textbook publishing(.319), chapters in books (.813),ongoing research (.116), patent and certified invention, (.583), occasional papers (.446), publication in learned journals (.601), technical reports (.591), scientific peer-reviewed bulletin (.463), conference papers (.354),working papers (.609), seminar papers (.078), and workshop papers (.878). Others such as local occasional papers (.040), local publications in learned journals (.007), and local conference papers (.017) are not significant.

Research Question Four: What are the challenges of social media use for research by lecturers in universities in South-west Nigeria?

Table 5: Challenges of Social Media Use for research

S/N	Challenges of Social Media	SA	A	SD	D	NAND
1	Privacy issues	79 (51.3)	60 (39.0)	10 (6.5)	5 (3.2)	-
2	Security issues	72 (46.8)	69 (44.8)	6 (3.9)	7 (4.5)	-
3	Copyright and intellectual property issues	58 (37.7)	77 (50.0)	7 (4.5)	6 (3.9)	6 (3.9)
4	Overabundance of information (information overload)	29 (18.8)	58 (37.7)	19 (12.3)	42 (27.3)	6 (3.9)
5	Time –consuming	51 (33.1)	51 (33.1)	25 (16.2)	25 (16.2)	2 (1.3)
6	Lack of institutional support	46 (29.9)	53 (34.4)	22 (14.3)	29 (18.8)	4 (2.6)
7	Trustworthiness and reliability of information presented	47 (30.5)	67 (43.5)	14 (9.1)	24 (15.6)	2 (1.3)
8	Lack of expertise on how to use for research	40 (26.0)	50 (32.5)	26 (16.9)	36 (23.4)	2 (1.3)
9	Low quality of shared content	34 (22.1)	53 (34.4)	30 (19.5)	33 (21.4)	4 (2.6)
10	Stealing of people's identity	59 38.3	65 (42.2)	14 (9.1)	14 (9.1)	2 (1.3)
11	Threat of spam/ phishing attacks	62 (40.3)	65 (42.2)	15 (9.7)	8 (5.2)	4 (2.6)
12	Cyber bullying	42 (27.3)	76 (49.4)	19 (12.3)	8 (5.2)	9 (5.8)

Results, as presented in Table 5, showed that 139(90.3%) of the respondents agreed that privacy issues was a challenge of social media use. It also showed that 141(91.6%) agreed that security issues was a challenge, while 135(87.7%) agreed that copyright and intellectual property issue was a challenge. The study found that 77(56.5%) and 102(66.2%) respectively agreed that information overload and time consuming were challenges of social media use for research. Lack of institutional support 99(64.3%), trustworthiness and reliability of the information presented 114(74.0%) and lack of expertise on how to use for research 90(58.5%) constituted another challenges as shown in the table. The study further revealed that low quality of shared content 87(56.5%), stealing of people's identity 124(80.5%), threat of spam/phishing attacks

127(82.5%), and cyberbullying 118(76.7%) were believed to be among the challenges of social media use for research.

Research Hypothesis

Null hypothesis ($H_{O1)}$: Social media use will not significantly influence research productivity of lecturers in universities in South-west Nigeria.

Table 6: Influence of use of social media on research productivity

Variables	N	X	SD	R	Sig
Use of social media	154	54.28	21.34	-0.13	0.12
Research Productivity	154	24.91	18.63		

Findings from the table 6 revealed that the r-value (-0.13) was not at significant at 0.05 (P>0.05). Therefore, social media had no significant influence on research productivity of the lecturers in universities in south-west Nigeria.

Discussion o**f Finding**s

Findings showed that there is no significant joint influence of social media on research productivity of lecturers surveyed. The finding support Persson and Svenningsson (2016) who also found that the use of social media was not significant. It however disagrees with Maglalang (2002) who found that the use of internet sites (such as social media) is significantly correlated to scientific productivity. The findings also revealed that Blogger, MySpace, Flickr, Facebook, Scribd, and Twitter were the social media that influenced research productivity most. While Blogger, Facebook, NatureNetwork, and Skype had positive influence, MySpace, Flickr, Scribd, and Twitter had negative influence.

On the aspects of research productivity influenced most by social media, the study revealed that publications in learned journals, conference papers, occasional papers, and textbook publishing were the aspects influenced most by use of social media. Others are scientific peer-reviewed bulletin, on-going research, and seminar papers. While the use of social media influenced local publications in learned journals, conference papers, occasional papers, and textbook publishing negatively, others such as seminar paper, scientific peer-reviewed bulletin, and on-going research were influenced positively.

The findings of the study revealed that privacy issues (90.3%), security issues (91.6%), copyright and intellectual property issue (87.7%), information overload (56.5%), time consumption (66.2%), and lack of institutional support are among the challenges of using social media for research. Others indicated in the study are lack of expertise (58.5%), low quality of shared content (56.5%), stealing of people's identity (80.5%) threat of spam/phishing attacks (82.5%) and cyber bullying (76.5%). Most of these findings are line with previous studies like Sewry and Schlenrich (2012) who found lack of privacy, social and information security to be among the challenges of using social for research; Al-Badi et al. (2013) who found time concern, privacy concerns, and security concern as challenges; and Protecter et al. (2010) who found lack of skill as one of the challenges of using social media for research.

Finally the study found that social media have no significant influence on research productivity of lecturers in university in South-west Nigeria. The finding supports Ehikamenor (2003) who found that the internet contributes little to improving scientific productivity. It however disagrees with Bastos (2015) who reported that scholarly network partially support academics output.

Conclusion

University lecturers in South west Nigeria are also on social media such as Facebook, YouTube, Academia, Google^{+}, ResearchID, and so on. Some of these social media are used by them for academics purpose such as for researches related activities, while a host of others are used for leisure and social life. Although the results from this study have shown that lecturers are making of use social media and that their level of use is high, they are not using them for solely research/ academic purpose. The reasons might not be unconnected with the challenges associated with the use of social media for research purpose or because they prefer the traditional mode to social media. Some of these challenges, as revealed in the study, are lack of expertise, privacy issues, security issues, information overload, and so on. In order to meet the challenges of this age however, there is need for lecturers to learn and

master how technologies like social media can help them to be more productive in their work especially that of research.

Recommendations

Based on the findings of this study, the following were recommended:

1. University lecturers in Nigeria should change their orientation about the social media and use them more for research as this can give them more visibility, help them to connect with other researchers across the globe, communicate research output, upload and download research works on the internet, and contribute to the ongoing research/academic debate.
2. The level of awareness of faculty staff members on various social media that could enhance their research productivity should be raised.
3. There should be institutional support for the use of social media for academic/research purpose. There should be a clear policy in place with regard to the use of social media for academic/research purposes as against the current situation where the lecturers are using based on self-initiative.
4. Social media conferences and workshops should be organized for lecturers at all levels especially those in the university on how to integrate social media tools, platforms, and other internet tools into their academic/research lives.
5. Concerted efforts should be made by institutions of higher learning, especially universities; on how to reduce to the barest minimum the various challenges faced by lecturers in their attempt to use social media for research.

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