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PUBLICATION OUTPUT OF PROFESSIONAL LIBRARIANS IN PUBLIC UNIVERSITY LIBRARIES IN GHANA

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Abstract

The study examines publication output among professional librarians in four public universities in Ghana. The major objectives of the study were to determine publication output of the professional librarians and investigate the challenges confronting publication efforts of the professional librarians, among others. The mixed methods approach was employed for the study. The questionnaire was used to collect data from 47 professional librarians and four university librarians were also interviewed. The Statistical Package for Social Sciences (SPSS) software was used to analyse the quantitative data collected through the questionnaire, while content analysis was employed to analyse the qualitative data that was gathered from the interviews. The analysis used was descriptive statistics, comprising frequencies, percentages and means, among others. The major findings revealed that publication output was low among the respondents and journal articles were the most popular publication format. Another finding also indicated that the

higher ranked professional librarians were more prolific than lower ranked ones, while the professional librarians from two of the public universities were most prolific. Generally, the results could not establish correlation between working experience and publication output of the professional librarians. The results revealed that challenges that hampered publication efforts of the professional librarians were lack of time and heavy workload, inflexible work schedule, and absence of formal mentoring programme. It is recommended that the professional librarians should be provided with work time for research and publication, training, workshops and seminars, formal mentoring programmes, and collaboration, among others, to facilitate their research and scholarly publication efforts.

Keyword: professional librarians, academic librarians, academic libraries, scholarly publication, publication output, public universities, Ghana.

Introduction

The importance of scholarly publication in the advancement and progress of a profession such as librarianship cannot be overstated (Ogbomo, 2010). Scholarly publications are very important because they contribute to career advancement, personal recognition among peers, improved income, enriched relationship with teaching faculty and professional colleagues. In addition, they add to the prevailing knowledge of the discipline, institutional prestige and also enable professional librarians to provide better service to their clients. Scholarly publications are done through peer-reviewed process and are the channels through which scholars add fresh knowledge to the prevailing body of literature and are usually produced in the formats of journal articles, technical reports, books, creative works, visual works, chapters in books, conference papers and proceedings, (Okafor, 2011; Tsafe, & Mohammed, 2016). It is through the peer-

review process that independent scholars in a particular field check the accuracy and validity of the claims made in the publication.

Several authors have stressed that librarians and their institutions stand to benefit a lot from research and scholarly publication. Aina (2004) opines that research and scholarly publication not only results in development of frontiers of librarianship and proffering answers to problems that emerge from its practice, but also the librarians stand to benefit enormously. In addition, Joint (2006) observes that there is positive correlation between scholarly publication and career progression of library professionals; they are appreciated for their work and consequently improve their profiles and build up their reputations. Hahn and Jaeger (2013) enumerated the benefits of engaging in research and scholarly publication by academic librarians as follows:

- i. earning recognition, respect, promotion, and, of course, building your resume/curriculum vitae;
- ii. sharing innovations and best practices and contributing to the knowledge base of the profession;
- iii. staying current on new research and innovations;
- iv. learning new skills and knowledge;
- v. enjoying the satisfaction of accomplishment;
- vi. gaining intellectual stimulation and fresh challenges.

Furthermore, Ahmadu (2004) agrees that regular publication is one of the rare means by which librarians can make themselves prominent as well as the sponsoring institution. Kling and Spector (2003) as cited in Baro, Oni and Onyenania (2009) aver that “the purpose of scholarly publishing does seem to be changing, in that it has moved from dissemination of knowledge to

building of reputation” (p. 183) and those librarians who desire to gain recognition must publish. Scholarly publication gives national and international visibility to the librarian (Edem & Lawal, 2002). In addition, Baro et al. (2009) indicate that promotion/career advancement, contribution to knowledge, personal and institutional prestige are the major benefits academic librarians derive from publication. Subsequently, Ocholla, Ocholla and Onyancha (2012) recommend that career progression of academic librarians to senior positions should be determined by research and publication output because they provide scholarly information to academic institutions; and they can do this better if they are able to engage in research and publication.

Arguing to justify the need for academic librarians to do research and scholarly publication, Verzosa (2007) posits that it is very important for librarians to engage in research “to improve problem-solving and decision-making in the workplace” (p.2). However, she lamented that research in librarianship, particularly within Philippines, was poor. She added that even though there was a large number of highly trained and highly skilled librarians in Philippines, there were a scarcity of research-oriented ones. McCluskey (2013) posits that academic librarians should not only be engaged in dissemination of information but also take active part in creation of new knowledge. He argues that as a librarian, one can contribute to research by involving in the process itself, thus going beyond mere provision of information into knowledge creation. Thus, a librarian becomes a knowledge creator when one engages in research and publication.

Some studies were done on research and publication output of librarians in Africa in general; some were undertaken by some West African scholars while others were based on Southern Africa that centred on publication counts of peer reviewed articles that appeared in national and international Library and Information Science (LIS) journals. For instance, Siteini

and Ocholla (2010) compared the research output and publication trends of 47 academic librarians in Eastern and Southern Africa from 1990 to 2006. The findings revealed that on average there was insignificant difference in publication between the librarians from Southern Africa and Eastern Africa; however, librarians from South Africa were most prolific. Moreover, in terms of individual libraries, the University of Botswana Library was the most productive. Rotich (2011) observes that the high publication output in South Africa could be attributed to how they managed their scholarly journals; and incentives in the form of subsidies paid by the government to the scholars who published. A similar study done by Ocholla et al. (2012) that investigated the trends of research and publication output and of academic librarians in Eastern Africa from 2000 to 2009 found that many of the academic librarians published in journals that were not indexed by Library and Information Science Abstracts (LISA); and most of the publications were done in journals that were not peer-reviewed. This state of affairs could be partly attributed to ignorance about the Library and Information Science journals or fear of rejection of manuscripts that were submitted for publication. The study also revealed that research visibility of the academic librarians was very low and that they published very few results of the researches they had done.

In fact, earlier studies done by Olorunsola and Ibegbulam (2003) and Onohwakpor and Tiemo (2006) indicated that low publication output was the foremost obstacle to promotion and career advancement of professional librarians. Another study done by Ogbomo (2010) confirms the results of the earlier findings that the greatest number of the professional librarians had stagnated on the same rank/position and could not be promoted for more than 10 years because of their inability to publish. The foregoing suggests that low scholarly publication output has been the main challenge confronting librarians' career progression.

Despite the immense benefits gained from research and scholarly publication (Edem & Lawal, 2002; Aceto, 2005; Johanlor, 2005; Baro et al. 2009; Hahn & Jaeger, 2013), many academic librarians in Ghana are not able to measure up to the task. Several librarians were unable to meet the requirements for promotion because of inadequate scholarly publications. A study carried out by Opoku (2012) in the largest public university library in Ghana revealed that the majority of professional librarians had been on the same grade or rank for over 10 years because they were unable to meet the scholarly publication requirement for promotion.

Incidentally, available literature suggests that very little study has been done in this area about it. If this current situation persists the morale of the professional academic librarians would be adversely affected and result in low productivity. Furthermore, senior positions in the libraries might not be filled as a result of stagnation in career advancement with its attendant financial implications. This is because the higher the status, the higher the monetary incentives attached. The situation could eventually lead to resignation, which in turn may discourage young professional librarians from taking up appointment in public university libraries.

Thus, it is extremely important to study the nature of these challenges in order to provide solutions to them as it pertains to professional librarians in public universities in Ghana. It is against this backdrop that this study investigated scholarly publication output among professional librarians in public universities in Ghana in order to establish the nature of the challenges confronting them in respect of scholarly publication activities.

Objectives of the Study

The objectives of the study were to:

1. Determine the publication output of the professional librarians

2. Establish the most popular publication format
3. Determine the most prolific institution
4. Determine the frequency of publication of the professional librarians
5. Determine the publication output and working experience of the professional librarians
6. Determine the publication output and rank of professional librarians
7. Investigate the challenges confronting publication efforts of the professional librarians

Brief Overview of the Study Areas

Kwame Nkrumah University of Science and Technology Library System

The Kwame Nkrumah University of Science and Technology (KNUST) Library system consists of the Prempeh II Library and six College Libraries. By January 1952, the library collection of the Teacher Training Department of Achimota College, numbering about 4,000 volumes, was relocated to the newly established Kumasi College of Technology, Science and Arts to form the nucleus of its library that was housed in a prefabricated building. By 1958, the book stock had increased to 19,000 volumes, while the journal holding stood at 580 titles.

In November 1961, the Kumasi College of Technology, Science and Arts was elevated to the status of a full-fledged university and became known as Kwame Nkrumah University of Science and Technology, while the library automatically became the University Library. Within that same year, the University Library moved into a new permanent building with a stock of 24,362 volumes. An extension to the main University Library started in 1979 and was completed in 1999; and provides seating capacity for 1,500 readers and adequate shelving space for books. The Library has seven departments; namely Administration, Acquisition, Lending, Cataloguing

and Classification, Reference and Research, Serials, and Institutional Repository and Electronic Information Services.

The University Library System consists of the Main Library known as Prempeh II Library and six College Libraries. The College Libraries are College of Agriculture and Natural Resources Library, College of Engineering Library, College of Science Library, College of Art and Built Environment Library, College of Health Sciences and College of Humanities and Social Sciences Library. The total collection in the University Library System is about 225,728 volumes, including 71,466 volumes in the College Libraries. The Library provides access to over 35,000 electronic journals from 50 academic databases and more than 100 million full-text documents, bibliographic information, abstracts, book reviews and about 800 serials titles. In addition, the Institutional Repository hosts 10,420 documents.

The University Librarian is the administrative and technical Head of the University Library System, which is made up of the Prempeh II Library and the six College Libraries. He is directly responsible to the Vice-Chancellor in all administrative, technical and professional matters concerning the libraries in the University. The KNUST Library System has a total workforce of 120, including twenty professional librarians. The library provides access to recorded knowledge in various formats based on the programmes offered in the institution (Agyen-Gyasi, 2011; KNUST, 2017; Field data, 2017).

The University of Ghana Library System

The University of Ghana Library system is the largest and oldest among the academic libraries in Ghana. The Balme Library, being the main library, is located in the middle of University of Ghana's main campus and was established in 1948 with opening of the University.

The University of Ghana Library System consists of the Balme Library, Accra City Campus library, the Business School Library, the Faculty of Law library and other libraries of Institutes, Schools, Departments and Halls of Residence of University of Ghana. The University of Ghana Library System hosts about 410,156 volumes of print resources; made up of textbooks, reference materials, electronic journals, electronic books and a large number of electronic databases. The Balme Library houses the special collections unit, which includes the Students' Reference Library, Africana Library, United Nations Library, Arabic Library, and Development Information Centre. The other libraries restrict their collections to their respective disciplines.

The University of Ghana Library System also provides excellent facilities and services to its clientele. These facilities include the Online Public Access Catalogue (OPAC), Research Commons, Knowledge Commons, Information Access Center, a twenty-four hour Reading Room, Conference Hall, Seminar Rooms, Discussion Rooms, and a networked environment with computers, photocopy services, printing and binding services, among others.

The University Librarian is the administrative and technical Head of the Library, and is directly responsible to the Vice-Chancellor in all administrative, technical and professional matters relating to the Library. The University Librarian is assisted by twenty-one professional librarians. The library is dynamic and continues to adapt to changing technologies and patron information-driven needs (The Obruni Archivist (2017); University of Ghana, Balme Library, 2017; Field data, 2017).

The University of Cape Coast Library System

The University of Cape Coast library began in 1962 with a collection of about 650 books mainly on English literature, economics, history and geography transferred from the University of Science and Technology in Kumasi. The collection was first housed in one of the lecture halls in the Faculty of Arts (Old Site). In April 1963, the library was moved into a temporary building with a capacity for 40 readers. Since its inception, the library's growth has been at a slow pace with a projected average of between 4000 and 5000 volumes.

The UCC Library system consists of the main library, Sam Jonah Library, the College Libraries, Departmental Libraries and Hall Libraries. The various Departments in the Library include Acquisition, Cataloguing, Client Services, and Student Reference. In addition, there are other sections in the Library, such as ICT Section, Digitisation Section, Disability Section, Bindery Section, Technical Support Unit, Post-graduate Section, and Development Information Centre. Special collections in UCC Library include Ghana Collection, Theses Collection, Law Collection, and Periodicals. The total number of books and bound volumes of periodicals available in the Library stands at 261, 170 books and about 4,126 periodicals. In addition, the UCC Library subscribes to online databases such as Research4Life, JSTOR, Ebsco, Emerald, Sciencedirect, TEEAL among others. The UCC Library is headed by a University Librarian who is assisted by a Deputy Librarian and eleven senior members. Other categories of staff are 89 senior staff and 105 junior staff (Opare-Adzobu & Filson, 2014; Field data, 2017).

The University for Development Studies Library System

The University of Development Studies (UDS) Library was established in 1993 in a temporary structure that could seat only 70 users at a time. The UDS Library system consists of the main Library located at Nyankpala Campus, and other libraries located at Tamale Campus, Navrongo Campus, and Wa Campus.

The UDS Library was established with a written Collection Development Policy. The total number of books accessioned by May 2013 was 44,000 volumes and by September 2017, the size of the collection was approximately 45,447, consisting of 41,739 books, and 3,708 periodicals. The Library subscribes to 23 online databases and over 15 free e-books. The online databases include Science Direct, AGORA, OARE, HINARI, and TEEAL. The UDS Library has an Institutional Repository made up of 11 Communities and 1029 archived materials.

The staff strength of the UDS Library stands at 77. They include eleven Senior Members, including the University Librarian, who is assisted by ten senior members, 36 senior Staff, and 30 Junior Staff. With these resources the UDS Library provides quality information to meet information needs of its clientele (Thompson, Amuda, & Akeriwe, (2015); Field data, 2017).

Literature Review

The available literature is replete with several definitions of publication output. For instance, Tsafe and Mohammed (2016) define scholarly publications as “those documents published through peer-review process and accepted in the form of recorded sources such as books, chapters in books, conference papers and proceedings, articles in refereed journals, creative works and visual arts among others”(p. 3). Similarly, Oni and Eziam (2014) refer to publication output as “the number of books or chapters in books, journal articles published, conference and workshop proceeding and other related publications such as bibliographies, abstracts, and indexes which are usually used in assessing one for promotion”(p. 129). Popoola (2008) posits that publication output is one of the critical yardsticks for determining academic staff productivity and partly determines both local and international recognition and respect for the staff and their institutions.

Furthermore, Ocholla et al. (2012) conducted a research in which he compared research and publication patterns and output of academic librarians in Eastern Africa from 2000 to 2009 using descriptive bibliometric techniques. The majority of the publications from ten countries and 102 libraries and universities investigated originated from Tanzania and University of Dar es Salaam and Sokoine University of Agriculture. Similarly, the most prolific librarians were from the same universities. The results found no positive correlation between the seniority of a librarian and publication output; since only 28.3 percent most senior library staff had publications reflected in the database.

Another study done by Wood and Park (2013) among Tennessee academic librarians revealed that 139 articles were produced by 115 individual authors. Within the five-year span of the research, almost, 23 percent of the academic librarians wrote at least one article. The average number of articles per author ranged from one to 10, with an average of 1.21 articles per author; and the most prolific six librarians wrote from five to 10 articles each. Majority of the librarians published only one article.

Similarly, Oni and Eziam (2014) did a descriptive survey among 55 academic librarians in five university libraries in Edo and Delta States of Nigeria to investigate their publication output. The findings revealed that 41 percent of the respondents from Edo State had published one to five articles, while 24 percent of the respondents from Delta had published one to five articles. Also, 26 percent respondents from Edo State had published six to ten articles, 24 percent of respondents from Delta State had published six to ten articles, 18 percent of the academic librarians from Edo State had also 21 articles and above, while 2 percent of the respondents from Delta State had produced 21 articles and above. They concluded that only few

librarians from Edo and Delta States had 21 and above publications because of many years of working experience and high academic qualification. This finding is similar to that of Ocholla and Ocholla (2013) that concluded that most prolific librarians were those in leadership positions and had a long working experience of library service.

In addition, Oni and Eziam (2014) in their study reported that 27 (79%) librarians from Edo State (Nigeria) published in journals (print only), while 15 (71%) librarians from Delta State (Nigeria) published in journals (print only). The findings also indicated that 19 (56%) librarians from Edo State had published some of their works in print and electronic journals, and 11 (52%) librarians from Delta States had published in both print and electronic journals. The same trend was confirmed in a similar study by Tsafe and Mohammed (2016) that analyzed scholarly publications of 123 librarians in seven states of North–West, Nigeria from 2000 to 2012 by descriptive survey using bibliometric technique. The study reported that 373 publications of various formats were produced. Journal articles ranked highest with 257 (69%) and was followed by 49 (13.1%) conference papers, 35 (9.4%) seminar papers, 12 (32%) edited works, and 2 (0.5%) books.

With regard to publication output, only one librarian published 16 articles and the greater percentage had published an average of at least one article. In addition, high-ranked librarians were more productive than the low-ranked ones. They concluded that majority of librarians were one time contributors.

The findings of a study done by O'Brien and Cronin (2016) indicated that majority of academic librarians who published fell within the age range of 36-55; indicating that most of those who published were in their mid-career and “established” in the work sense. They posit that working experience of 11-20 years in the library was ideal for those publishing. The results

revealed that there was a positive correlation between higher educational qualification and publication output with 92 percent of those who published attaining higher level of education. Interestingly, 50 percent who published had only published once; 26 percent had published twice and thrice; the remaining 24 percent published five times and above, while 10 percent published five times and above. Several studies have been done to investigate the factors that constitute challenges to scholarly publication among professional librarians. Most of the published literature on publication output among the professional librarians reveals that lack of time and heavy workload are the greatest challenges facing professional librarians in their quest to do research and publish. Ochai and Nedosa (2004) point out that while the teaching staff have research interests, and time for this is factored into their teaching programmes, this type of opportunity was unavailable to librarians. They add that the combining professional duties with the challenges of conducting research and publication were the greatest obstacle to career development in the library profession. The inflexible work schedule of library jobs is often cited in the available literature as another obstacle that hampered research productivity among professional librarians. Olorunsola and Ibegbulam (2003) stress that librarianship as an 8am to 4pm job in Nigeria that demands constant job presence seriously restricts the ability of librarians to publish for career advancement and meet tenure requirements. The Nigerian situation might not be different from what pertains in Ghana.

Jayasundara (2011) did literature analysis, a survey based on telephonic interview of 10 professional librarians and opinion modeling in Sri Lanka. The results indicated that combining professional duties with academic work, such as research and publication, was the major impediment to the career advancement of the respondents. They mentioned that they had inadequate time to do research and teaching; whilst performing their professional duty.

A study done by Oni and Eziam (2014) showed that long working hours/time constraint and heavy work load were the major challenges the respondents faced in respect of research and publication. Other obstacles mentioned were high charges for publication, lack of funds, and lack of incentives as the obstacles that negatively affected scholarly publication by academic librarians. Similarly, Smigielski, Laning and Daniels (2014) conducted a survey among 29 library Directors to determine how Association of Research Libraries (ARL) encouraged research and publication among their librarians. The librarians reported inadequate time for doing research and publication due to heavy workload; and had to do research activities in their private time.

Furthermore, Okonedo (2015) identified some obstacles faced by librarians in their quest to publish. Majority of the librarians were faced with time constraints and this corroborates the study done by Oni and Eziam (2014), Ogbomo (2010) and Moahi (2007). Poor scheduling of time to carry out research had been identified to be the most significant challenge faced by the librarians. Other challenges mentioned were poor data interpretation skills, exorbitant fees charged for publishing, rejection of manuscripts by journals, difficulty in getting the right journal to publish the article, and lack of institutional support for research and publishing. Moreover, one of the most recent studies done by Tsafe and Mohammed (2016) revealed that heavy workload, absence of internet access and high charges for publication were major challenges identified. This finding agrees with an earlier one done by Okafor and Dike (2010). Furthermore, Ibegbulam and Jacintha (2016) in their study done in Nigeria found that the librarians mentioned that weak/poor research orientation impeded their publication activities. Other obstacles identified were absence of supportive library environment, fixed work schedules, absence of support from experienced colleagues, lack of institutional mentorship programmes, absence of

personal research agenda, indiscipline towards research and publication, and unawareness of where to publish.

Finally, O'Brien and Cronin (2016) found that majority of the respondents mentioned time constraint as the key reason for not publishing. The second major challenge given was absence of confidence in doing research and scholarly publication. This lack of confidence to publish corroborates the findings of Kennedy and Brancolini (2012) and Hoffman, Berg and Koufogiannakis (2014)

Methodology

The study adopted the mixed method design because “the combination of methods provides a better understanding than either quantitative or qualitative method alone” (Creswell, 2009, p.143). The study was limited to all professional librarians in four selected public university libraries, namely, University of Ghana (UG), Kwame Nkrumah University of Science and Technology (KNUST), University of Cape Coast (UCC), and University for Development Studies (UDS). These universities were selected based on the world ranking of universities in 2017. The four institutions were most highly ranked in Ghana (Ranking Web of Universities, 2017). The justification for selection of these universities was that their ranking was partly based on their research and publication output; being one of the key indicators of the ranking. Moreover, the four institutions have well-established libraries and also employed the greatest number of professional librarians.

There was no sampling in this study because the entire population of the professional librarians was 63 and 4 university librarians. For this reason, the researchers used total enumeration of all the 63 professional librarians and 4 university librarians. Egbule and Okobia

(2001) emphasised that the whole population can be investigated when the population is small; when there is adequate time to undertake the research, and when the sole purpose of the research is to provide precise account of the population. The instrument used in this study was the closed-ended questionnaire. The questionnaire was used to collect data from the professional librarians because it is practical, time-saving, makes compilation of data and analysis easy, and relatively cost effective. The semi-structured interview approach was employed to collect qualitative data from university librarians for this study. The researcher adopted the pilot-tested questions, with slight modifications, that were used in previous similar studies done by Sassen and Wahl (2014) and Ibegbulan and Jacintha (2016). Finally, the instruments were also pre-tested at the University of Education, Winneba to establish their face validity and improve the questions, format and scale.

A total of 48 copies of the questionnaire were distributed to the respondents. However, 47 copies of the questionnaire were fully completed and returned and also found valid for analysis. This represented 97.9 percent response rate. Babbie (2005) believes that a response rate of 50 percent is adequate for analysis and reporting, while 60 percent is good, and 70 percent is very good. Consequently, the response rate of 97.9 percent for this study is highly commendable.

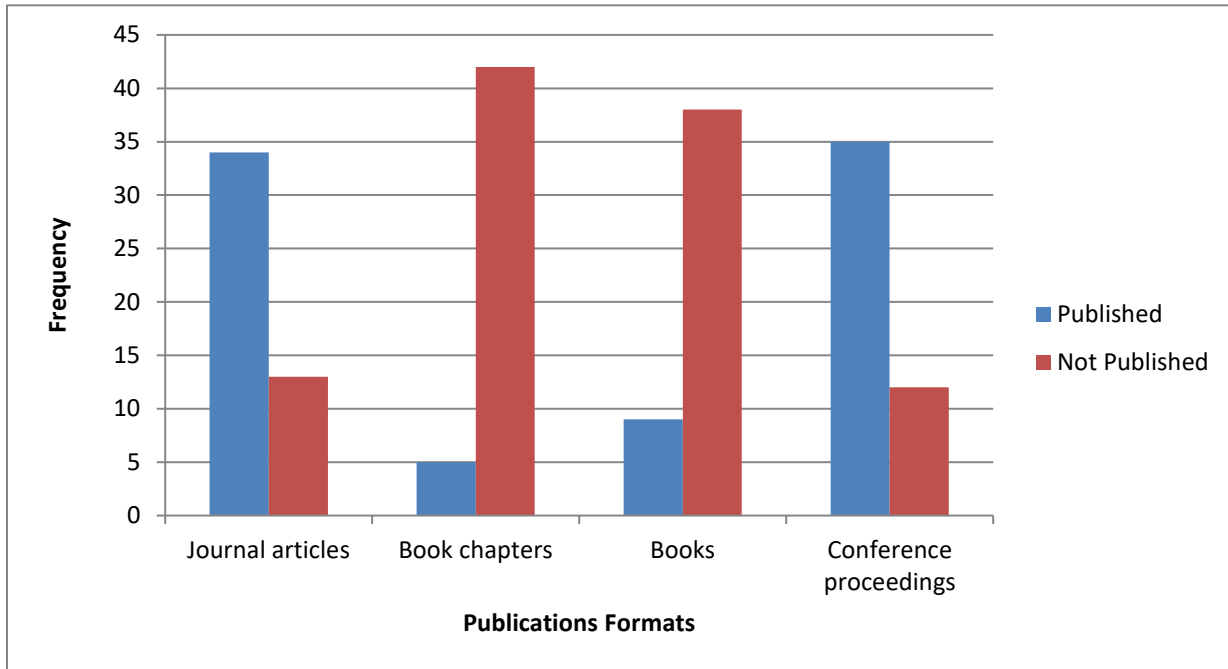
All 17 copies of the questionnaire distributed in UG were completed and returned, representing 100 percent rate of response. Similarly, all the respondents from UCC filled and returned 9 (100%) copies of the questionnaire that were distributed to them. Likewise, all the respondents from UDS completed and returned 8 (100) copies of the questionnaire that were distributed to them. On the other hand, the respondents from KNUST completed and returned 13 out of 14 copies of the questionnaire, representing 92.9 percent rate of response. Telephone interviews were conducted with the four university librarians of UG, KNUST, UCC and UDS, respectively.

The Statistical Package for Social Sciences (IBM SPSS Version 20) software was used to analyse the quantitative data using frequencies, percentages, means, histograms, and tables to interpret the data obtained. In respect of the qualitative data, all interviews were audio-recorded and transcribed. Qualitative content analysis was used to analyse data gathered from the interview scripts.

Findings of the Study

The data analysis was done based on the stated objectives of the study. In line with the first and second objectives of the study, the respondents were asked to indicate the total number of publications and their format they had done up to the time of the data collection. The responses are illustrated in Figure 1. In all, 284 different types of publications were done by the respondents; comprising 212 journal articles, 49 conference proceedings, 14 books and 9 book chapters. The results indicated that 35 (74.5%) respondents published 49 articles as conference proceedings; indicating an average of 1.4 articles per author, while 34 (72.3%) respondents published a total of 212 journal articles; that gave an average of 6.2 articles per author. In addition, 9 (19.1%) respondents published 14 books; indicating an average of 1.6 books per author and only 5 (10.6%) respondents published 9 book chapters; representing an average of 1.8 book chapters per author. In all, every professional librarian recorded an average of 6 publications each; which were low since 30 (63.8%) respondents had acquired working experience of six years and above.

Figure 1: Publication Output of the Respondents (Format)



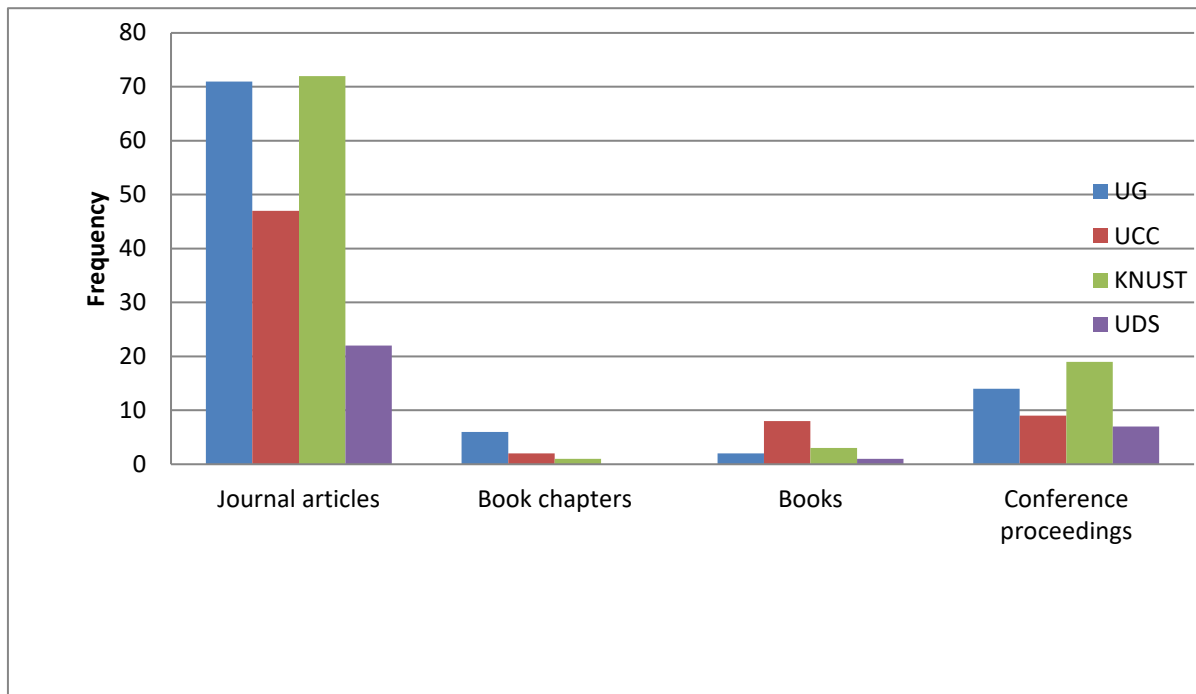
Source: Field data, 2017

In respect of publication format, journal articles were the most preferred publication, while book chapters were least popular format. Significantly, 42 (89.4%) respondents had not published any book chapters, 38 (80.9%) respondents had published no book, and 22 (46.8%) respondents had not published articles as conference proceedings, while 13 (27.7%) respondents had never published a journal article.

The third objective sought to establish the most prolific institution. The findings are illustrated in Figure 2. As illustrated in Figure 2, 72 (34.0%) journal articles out of a total of 212 were published by respondents from KNUST, followed closely by respondents from UG who published 71 (33.5%) journal articles, respondents from UCC published 47 (22.2%) journal articles, while 22 (10.4%) journal articles were published by respondents from UDS. In addition, 8 (57.1%) books out of a total of 14 were produced by respondents from UCC, followed by respondents from KNUST who published 3 (21.4%) books, 2 (14.3%) books were authored by respondents from UG, while 1 (7.1%) book was written by a respondent from UDS. The findings

also showed that 6 (66.7%) book chapters out of a total of nine were written by respondents from UG, 2 (22.2%) book chapters were written by respondents from UCC, while 1 (11.1%) book chapter was written by a respondent from KNUST. Furthermore, 19 (38.8%) conference proceedings, out of a total of 49, were done by respondents from KNUST, 14 (28.6%) were published by respondents from UG, 9 (18.4%) were done by respondents from UCC, while respondents from UDS produced 7 (14.3%) conference proceedings. According to the finding, the mean publication output of the professional librarians based on their institutions of employment were UG 5.5, UCC 7.3, KNUST 7.3, and UDS 3.8 respectively. The results indicated that professional librarians from UCC and KNUST recorded the same mean publications output and were most prolific while respondents from UDS had the least mean publication output and were least productive.

Figure 2: Publication Output and Institutions of the Respondents



Source: Field data, 2017

The fourth objective sought to establish frequency of publication of the professional librarians. In order to determine publication frequency of the respondents, they were asked to indicate how frequently they had published. The results are presented in Table 1.

Table 1: Frequency of Publication

Frequency of Publication	Responses	
	Freq.	%
Once in a year	9	19.1
Twice in a year	7	14.9
Thrice in a year	5	10.7
Others	26	55.3
Total	47	100.0

Source: Field data, 2017

It could be seen from Table 1 that 9 (19.1%) out of the 47 respondents indicated that they had published once in a year, 7 (14.9%) respondents had published twice in a year while 5 (10.7%) respondents had published thrice in a year. Significantly, 26 (55.3%) respondents, representing more than half of the respondents did not indicate specific frequency of publication. This revelation calls for a serious concern as it could adversely affect promotion and career development of the professional librarians.

In line with the fifth objective of the study, the respondents were asked to indicate their total publications and their working experience. The results are presented in Table 2.

Table 2: Publication Output and Working Experience of the Respondents

Working Experience (Years)	Publication Output of Respondents									
	Journal Articles		Book Chapters		Books		Conference Proceedings		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1 – 5	44	20.8	2	22.2	3	21.4	18	36.7	67	23.6
6 – 10	36	17.0	0	0.0	0	0.0	11	22.4	47	16.6
11 – 15	23	10.8	1	11.1	3	21.4	5	10.2	32	11.2
16 – 20	49	23.1	3	33.3	0	0.0	5	10.2	57	20.1
Above 20	60	28.3	3	33.3	8	57.1	10	20.4	81	28.5
Total	212	100	9	100	14	100	49	100	284	100

Source: Field data, 2017

As illustrated in Table 2, the respondents who had worked for more than 20 years had recorded a total of 81 publications. This comprised 60 (28.3%) journal articles, 3 (33.3%) book chapters, 8 (57.1%) books, and 10 (20.4%) conference proceedings. That was followed by the respondents who had worked for 1-5 years. They had published 44 (20.8%) journal articles, 2 (22.2%) book chapters, 3 (21.4%) books, and 18 (36.7%) conference proceedings; a total of 67 publications.

The respondents who had worked for 16-20 years had also published 49 (23.1%) journal articles, 3 (33.3%) book chapters, and 5 (10.2%) conference proceedings; a total of 57 publications. Likewise, the respondents with working experience of 6-10 years had published 36 (17.0%) journal articles, and 11 (22.4%) conference proceedings; a total of 47 publications. Lastly, the respondents who had worked for 11-15 years had also recorded a total of 32 publications; comprising 23 (10.8%) journal articles, 1 (11.1%) book chapter, 3 (21.4%) books, and 5 (10.2%) conference proceedings. The result showed that the mean publication output of the respondents vis-à-vis their working experience were 16-20 years, 11.4; above 20 years, 7.4; 6-10 years, 6.9; 11-15 years, 4.4; and 1-5 years, 3.9, respectively. The respondents who had working experience of 16-20 were the most prolific, and were followed by the respondents who had working experience of 20 years and above. On the other hand, the respondents who had acquired working experience of 1-5 years were the least productive. This finding could not establish a positive correlation between publication output and working experience of the respondents.

The sixth objective of the study sought to determine the relationship between the publication output and rank of the respondents. The results are presented in Table 3.

Table 3: Publication Output and Rank of the Respondents

Rank	Publication Output									
	Journal		Book		Books		Conference		Total	
	Articles		Chapters				Proceedings			
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Junior Asst. Librarian	11	5.2	2	22.2	1	7.1	5	10.2	19	6.7
Asst. Librarian	68	32.1	3	33.3	4	28.6	23	46.9	98	34.5
Senior Asst. Librarian	118	55.6	4	44.4	7	50.0	19	38.8	148	52.1
Deputy Librarian	15	7.1	0	0	2	14.3	2	4.1	19	6.7
Total	212	100	9	100	14	100	49	100	284	100

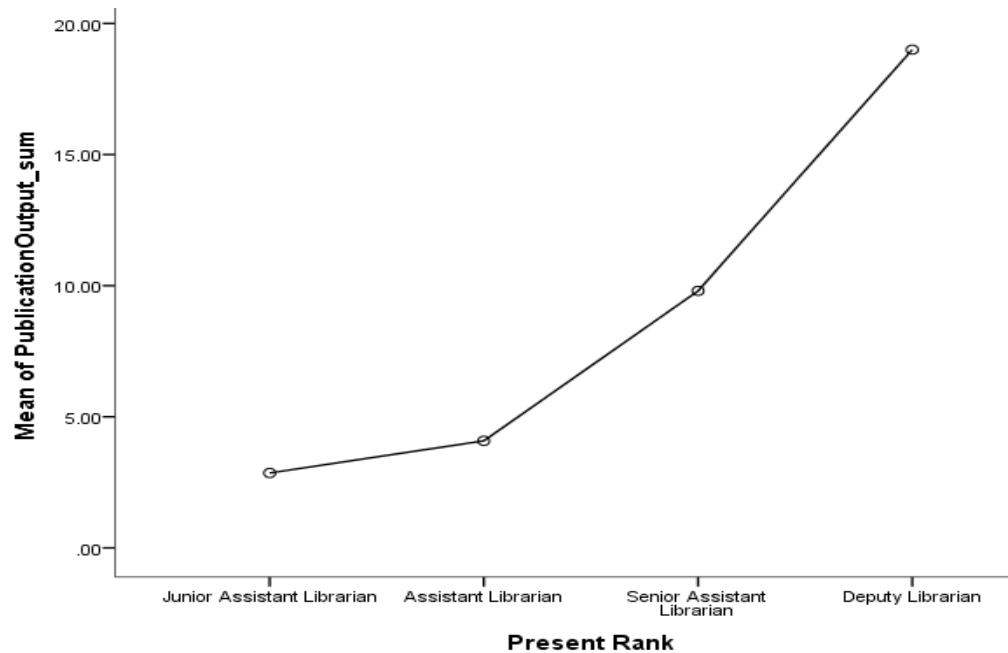
Source: Field data, 2017

As illustrated in Table 3, Senior Assistant Librarians had published 118 (55.7%) journal articles, 4 (44.4%) book chapters, 7 (50.0%) books, and 19 (38.8%) conference proceedings; a total of 148 publications. Also, the Assistant Librarians had done a total of 98 publications. That comprised 68 (32.1%) journal articles, 3 (33.3%) book chapters, 4 (28.6%) books, and 23 (46.9%) conference proceedings. Furthermore, Junior Assistant Librarians had published 11 (5.2%) journal articles, 2 (22.2%) book chapters, 1 (7.1%) book, and 5 (10.2%) conference proceedings; a total of 19 publications. Similarly, a Deputy Librarian had done 19 publications; comprising 15 (7.1%) journal articles, 2 (14.3%) books, and 2 (4.1%) conference proceedings

As illustrated in Figure 4.5, the mean publication output of the respondents were Deputy Librarian, 19.0; Senior Assistant Librarians, 9.8; Assistant Librarians, 4.1; and Junior Assistant Librarians, 2.9, respectively. The results showed that the Deputy Librarian had published 6.8 times on average more than Junior Assistant Librarians. Similarly, Senior Assistant Librarians

had published 2.4 times on average more than Assistant Librarians. As depicted in Figure 3, the study has established a positive correlation between the publication output and rank of the respondents.

Figure 3: Average Publication Output and Rank of the Respondents



Source: Field data, 2017

The seventh objective of the study sought to investigate the challenges that confronted professional librarians in their quest to publish. In view of this, the study sought the views of respondents with regard to challenges they faced in their quest to do scholarly publication. The responses are presented in the Table 4.

Table 4: Challenges Hindering Scholarly Publication

Challenges	Responses							
	Agree		Disagree		Neutral		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Lack of Time and Heavy Workload	41	87.2	6	12.8	-	-	47	100.0
Inflexible Work Schedule	27	57.4	10	21.3	10	21.3	47	100.0
Absence of Formal Mentoring Programme	25	53.2	11	23.4	11	23.4	47	100.0

Source: Field data, 2017

As illustrated in Table 4, lack of time and heavy workload placed first, with 41 (87.2%) respondents indicating that it was the greatest challenge they faced, while 6 (12.8%) respondents disagreed. Since research and publication demands time, this finding implies that publication output of the professional librarians would be adversely affected. Inflexible work schedule came second; with 27 (57.4%) respondents agreeing that it was the greatest challenge that hindered their scholarly publication efforts, 10 (21.3%) respondents disagreed, while 10 (21.3%) respondents were ambivalent. Flexible work schedule enables professional librarians to use their time productively and have sufficient time for research and publication activities. This result implies that research and publication activities among the professional librarians would be adversely affected. The third challenge that confronted the respondents in their quest to publish was absence of formal mentoring programme; with 25 (53.2%) respondents indicating that it was their greatest challenge, 11 (23.4%) respondents disagreed, while 11 (23.4%) respondents were ambivalent. This finding implies that the professional librarians would lack the skills and capacity that they would have acquired from experienced librarians to do research and publication; and it would adversely affect their publication output.

Furthermore, the interviewees mentioned insufficient opportunities to publish locally or nationally, inadequate funding for research, rejection of manuscripts by editors, lack of interest and low motivation to publish because it was not mandatory requirement for promotion, lack of determination, and indiscipline among professional librarians with regard to time management. Significantly, three of the interviewees rejected the notion that inadequate time and heavy workload was the major challenge that hindered scholarly publication among professional librarians.

One of the interviewees had this to say:

“The problem is lack of interest in publication....you can take a horse to the river, but cannot force it to drink”

Another interviewee observed that:

“The basic challenge is about mindset because the librarians are not motivated to carry out research and do publication. They want to do things in the same old way... attitudinal problem, and lack of self-drive”.

Discussion of the Results

The findings revealed that 35 (74.5%) of the respondents had published conference proceedings, followed by journal articles, 34 (72.3%); books 9 (19.1%), and book chapters, 5 (10.6%), in that order. Overall, the respondents had recorded a total of 284 publications; an average of 6 publications each. In addition, each of the university librarians who were interviewed had published more than 20 articles. However, journal articles were the most popular publications format among the respondents, that is 212 (74.6); followed by conference proceedings 49 (17.3); books 14 (4.9%), and the last being book chapters, 9 (3.2%). This finding

agrees with that of Tsafe and Mohammed (2016) in which journal articles had the highest rate of publication and followed by conference papers. This result also corroborates that of Ocholla et al. (2012) that scholarly journals still remained the most popular format for scholarly publication among academics.

Furthermore, the publication output in respect of the institutions of employment of the professional librarians indicated that professional librarians from KNUST and UCC were the most prolific, since they had done an average of 7.3 publications each, while respondents from UDS had recorded 3.8 publications each and were least productive.

With reference to frequency of publication, the findings indicated that majority of the respondents, 38 (80.0 %) had not published in a year; 40 (85.1%) had never published within a two-year period, while 42 (89.4%) had not done any publication in a three-year period. This finding supports a study done by Opoku (2012) that reported that 40 percent of the respondents had no publication to their credit. This result also supports the findings of Ogbomo (2010), Wood and Park (2013) and Tsafe and Mohammed (2016) that reported that most librarians published only once and that the majority of the respondents had not published any paper within a period of two years and five-year period. Similarly, Carter, Snyder and Imre (2007) also reported that at least 50 percent of the respondents had failed to publish any peer-reviewed articles in refereed journals in previous five years at the time of the study. The low publication output among the respondents had serious implication regarding their promotion and career advancement. It could partly be the reason why 31 (66.0%) of the respondents were below the rank of Senior Assistant Librarian; a rank that is earned through promotion mostly due to publication.

The result also revealed that the mean publications output of the respondents vis-à-vis their working experience were 16-20 years, 11.4; above 20 years, 7.4; 6-10 years, 6.9; 11-15 years, 4.4, and 1-5 years, 3.9, respectively. The respondents who had working experience of 16-20 years ranked first, while those who had least working experience of 1-5 years ranked last. This result could not establish a positive correlation between working experience and publications output of the respondents. This result did not support the findings of Hoffman et al. (2014) and O'Brien and Cronin (2016) that library work experience is required for those publishing.

Concerning the relationship between the rank of the respondents and publication output, the highest ranked respondent, a Deputy Librarian, was the most prolific as she had recorded a total of 19 publications. The findings revealed that the Deputy Librarian had published 6.8 times on average more than the Junior Assistant Librarians. Similarly, the Senior Assistant Librarians had published 2.4 times on average more than Assistant Librarians. Similarly, each of the four university librarians interviewed had published more than 20 articles; an indication that the university librarians were more productive than the professional librarians. Generally, the study has established a positive correlation between the ranks of the respondents and their publication output. The increasing trend in publications output witnessed in the present study in vis-à-vis the rank of the respondents could be attributed to requirement for promotion of senior members in public universities in Ghana. This finding supports the studies done by Carter et al. (2007) and Ocholla and Ocholla (2013) and Tsafe and Mohammed that based on contribution to journals by rank or position of librarians, the most prolific librarians were those in leadership positions, possibly because they had long history of library services and experience. However, the findings

contradict the results of the earlier study carried out by Ocholla et al. (2012) in which they found no relationship between the seniority of a librarian and publication output.

Furthermore, the findings indicated that lack of time and heavy workload was the first and greatest challenge that hindered scholarly publication among 41 (87.2%) respondents. Similarly, the second challenge identified in the study was inflexible work schedule, as mentioned by 27 (57.4%) respondents. However, three of the interviewees disagreed with the assertion that lack of time and heavy workload was the greatest challenge that hindered scholarly publication among the professional librarians. Rather they indicated that lack of determination, and indiscipline with regard to time management could be responsible for low publication output among professional librarians. According to one of the interviewees some professional librarians lack personal motivation to publish because it was not a mandatory requirement for their promotion/tenure.

However, several studies were done that supported the assertion that lack of time and heavy workload coupled with inflexible work schedule were the greatest challenge that adversely affected publication output among academic librarians. For instance, all earlier studies done by Fennewald (2008); Clapton (2010); Oni and Eziam (2014); Okonedo (2015), and Tsafe and Mohammed (2016) reported that lack of time and heavy workload was the greatest challenge confronting research and scholarly publications among academic librarians. Fennewald (2008) observes that “Given the demands of their position, almost all librarians interviewed identified time as the major hindrance to accomplishing research” (p. 110). The issue of time was also expressed by library administrators in a study carried out by Perkins and Slowik (2013) that “Nearly all the interviewees felt that time was the greatest obstacle academic librarians faced in keeping up with research in the field”(p. 151).

These researchers agree that professional librarians in universities in Ghana work for 40 hours a week and have to combine professional duties with rigorous research and publication activities. The job schedule of professional librarians is from 8am to 5pm and that demands constant presence as compared to teaching faculty who have flexible work schedule. Consequently, professional librarians have little time for research and publication activities; hence low publication output. Hill (1994) argues that when academic librarians are expected to do research and publication activities besides their daily routine professional duties and responsibilities, they would find that they have more to do than what 40-hour workweek could handle.

Furthermore, 25 (53.2%) respondents mentioned that absence of formal mentoring programme was the third challenge confronting their scholarly publication efforts. This finding is corroborated by the results of a study by Ibegbulam and Jacintha (2016) which reported absence of formal mentoring programmes as one of the challenges that hindered research and scholarly publication among the respondents. This finding also contradicts the study done by Fennewald (2008) that reported that availability of supportive environment that included formal mentoring as a significant factor that contributed tremendously to research and publication efforts of the respondents. Similarly, studies done by Smigielski et al. (2014) reported that financial support, protected time for research and mentoring programmes were the most frequently used approaches employed to promote research and productivity at libraries of the ARL. Namhila (2014) also acknowledged that availability of formal mentoring programmes contributed significantly to publication output of academic librarians in University of Namibia and Tampere University, Finland. In the foregoing, it is not an overstatement to indicate that the low

publication output among the respondents could be partly attributed to prevalence of these challenges mentioned by the respondents.

Conclusion

In order to achieve the objectives of the study, 47 professional librarians and 4 university librarians from UG, KNUST, UCC and UDS were selected to participate in the study. The findings of the study revealed that the professional librarians had done a total of 284 publications; an average of 6 publications each. This publication output was low since 30 (63.8%) professional librarians had acquired working experience of six years and above. The four university librarians had published more than 20 articles each. The most popular publication format were journal articles that constituted 212 (74.6%) of the entire publication output. In addition, the professional librarians from KNUST and UCC were most prolific and had done an average of 7.3 publications each. Also, professional librarians with working experience of 16-20 years had done an average of 11.4 publications each, while the respondents who had working experience of 1-5 years had recorded an average of 3.9 publications each. Significantly, the results could not establish a positive correlation between working experience and publication output of the professional librarians.

The finding also indicated that the highest ranked professional librarian had done 19 publications, while the least ranked recorded an average of 5.4 publications each. In addition, each of the four university librarians had done more than 20 articles. The higher ranked respondents were more productive than the lower ranked ones. Generally, the result has established a positive correlation between the rank of the respondents and their publication output. Concerning the frequency of publication, 38 (80.0%) professional librarians had not

published in a year; 40 (85.1%) had never done any publication in a two-year period, and 42 (89.4%) had not published in a three-year period.

Furthermore, the results indicated that the professional librarians faced three challenges that hindered their research and scholarly publication efforts. They are lack of time and heavy workload, 41 (87.2%); inflexible work schedule, 27 (57.4%), and absence of formal mentoring programme, 25 (53.2%). On the other hand, three university librarians disagreed with the respondents and attributed the low publication output among professional librarians to lack of determination, lack of personal motivation and indiscipline in respect of time management. The results of the study clearly indicated that the objectives of the study were met.

Recommendations

Based on the findings of the study, the following recommendations were made to address the challenges that confronted the professional librarians in doing scholarly publication.

1. Work Time for Research and Scholarly Publication

With regard to inadequate time to do scholarly publication, professional librarians should be provided work time to be factored into their professional duties to allow for adequate time to facilitate research and publications just as the teaching faculty. This will allow them to use some hours each week solely for research and publication activities.

2. Training, Workshops and Seminars

The university librarians should collaborate with Ghana Library Association (GLA) and Consortium of Academic and Research Libraries in Ghana (CARLIGH) to organize more workshops and seminars on “How to get published” in order to equip newly qualified professional librarians with requisite skills to enhance their research and publication skills.

3. Formal Mentoring Programmes

Formal mentoring programmes should be established in the university libraries to support research and publication activities of professional librarians. In this case, experienced librarians may suggest research direction in order to assist the mentees to remain focused on particular research agenda. The mentors may recommend topics for research and edit manuscripts of the mentees for publication and also share information relating to available publication opportunities.

4. Collaboration

The library managements should initiate collaboration among professional librarians in order to afford them the opportunity to develop their research and publication skills. The collaboration may take the form of administering research projects and writing articles.

5. Open Access Publishing

Scholars, including professional librarians should take advantage of the new window of opportunity presented by Open Access Publishing to engage in scholarly publication. This is because they provide unlimited access to online peer-review, digital, online, and free of most copyright and licensing restrictions (Alemna, 2016).

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