

# EXPLORING RESEARCH SUPPORT BY ACADEMIC LIBRARIANS TO FACULTY MEMBERS

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## Abstract

This article explores the availability and relevance of research support offered by academic librarians to faculty members within the Colleges of Health Sciences and Basic and Applied Sciences at the University of Ghana, with the background that current technological changes in librarianship have made research support a critical function of academic libraries. Mixed methods research design was adopted for the study. Data was collected from faculty members and academic librarians through questionnaires and semi-structured interviews respectively. The study concluded that research support activities by academic librarians exist and are seen as very relevant to faculty members. However, as there is an increase in technological advancement in academic library services, only the Online Public Access Catalogue (OPAC) was heavily utilized for research support whereas Selective Dissemination of Information (SDI) by academic librarians to faculty, news alerts, and lists of new arrivals were the least utilized services. The study observed that academic librarians had not utilized social media in communicating research support to faculty members although they had

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a positive mindset about its use. The identified ways of communicating research support to faculty members were through emails, the “ask the librarian” system on university websites, presentations by academic librarians at workshops for faculty members, notices on bulletin boards and one-on-one interactions. This study recommends that academic librarians regularly update their knowledge on current trends of research support tools and services to support faculty in the conduct of their research.

*Keywords:* research support, research support tools, faculty members, academic libraries, academic librarians, and electronic resources

## **Introduction**

The growing interest in research is highlighted through universities’ strategic plans, international academic rankings, and higher education accreditation agencies (Lawal, 2021; Si et al, 2019).

Academic libraries have historically supported both teaching and research, but recent technological advancements have created new roles that support faculty members’ research activities and the achievement of their research goals (Tang & Zhang, 2021). The majority of researchers do not know the scope of what academic librarians can offer as far as their research activities are concerned (Klain Gabbay & Shoham, 2017; Vaughan et al., 2013).

Academic libraries are expected to provide research support as well as help in the development and use of new technologies and new models of scholarly communications (Solimine, 2014). Research support by academic libraries is understood as services that libraries provide to aid in the research process. This involves an active and proactive engagement of the librarian with the researcher throughout the research process (Osadebe & Okwor, 2021).

## **Statement of the Problem**

Research support from academic librarians to faculty members is scarcely recognised unlike the contributions made toward research conduct by students (Klain Gabbay & Shoham, 2017; Tang & Zhang, 2021). This study explores the research support offered by academic librarians to faculty within selected colleges at the University of Ghana. The College of Health Sciences and the College of Basic and Applied Sciences were selected for the study.

This study is therefore guided by the following research questions:

- a. What research support services are offered by academic librarians to faculty members in the College of Health Sciences and the College of Basic and Applied Sciences at the University of Ghana?
- b. What tools and resources are available for research support?
- c. How can academic librarians communicate their research support activities effectively to faculty members?

## **Background of the University of Ghana Library System**

The University of Ghana Library System (UGLS) comprises the Balme Library (main university library, established in 1948) and other libraries in the various schools, institutes, departments within the colleges, as well as libraries in halls of residence and the Accra City campus of the university. The collection of the University of Ghana Library System consists of both electronic and print resources. Libraries in the Colleges of Health Sciences and Basic and Applied Sciences depend on the main University Library's electronic resources for their students and faculty members.

## **Literature Review**

### *Research support services offered by academic librarians to faculty members*

A study that sought to align library services with the research lifecycle was conducted by Ragon (2019) among biomedical researchers and library leaders in the United States of America. The stages in the research lifecycle used as codes for data gathering were planning research, conducting research, disseminating research, and assessing research impact. The results showed that library support is stronger at the beginning and the end of the research lifecycle and weaker during the conducting phase. As a start, most libraries provide online or remote reference and information services popularly known as Ask or Chat with a Librarian to provide online information support to researchers (Walsh & Rana, 2020). This is normally offered on the academic library's website.

Advances in digital technology have also given rise to many ways of disseminating research innovations and inventions resulting in the critical need for librarians who can

manage library electronic resources as well evaluate the importance of databases for the research community (Kataria, 2014; Mi, 2015; Sarli & Carpenter, 2014). Faculty members need support from academic librarians in areas such as use of the institutional repository and electronic publishing (Howie & Kara, 2022; Ocran & Afful-Arthur, 2022). Research data management and systematic or scoping reviews are some of the innovative services that complement other research support services from academic librarians (Walsh & Rana, 2020). Such services may not require face-to-face consultations. Academic librarians should primarily provide research support to faculty members throughout the whole research lifecycle, which includes the conception of the research, data processing and analysis, publication, sharing, and preservation of research findings, as well as curation of findings (Ketchum, 2017).

### *Availability of tools and resources for research support*

Ragon (2019) identified an interesting characteristic of many researchers, in that they prefer to rely on any information source rather than work with a librarian to achieve their aims. Whether librarians are seen face-to-face or through virtual means their research support services must still be utilized. There is therefore the need for quality tools and infrastructure for such services. With the rise of digital services in all spheres of academics, it is necessary for academic libraries to adapt accordingly and provide services that are better suited for these changes (Fagan et al., 2022).

Several tools and infrastructures exist in libraries for research support services. They include tools for identifying, tracking, and managing funding opportunities; data management and services; publishing and dissemination; and tracking and demonstrating research impacts and metrics. They comprise online databases including access to full text articles, journals, and other documents, institutional repositories, the library's website, and the online public access catalogue (OPAC) (Habiba & Zabed Ahmed, 2021; Harlow & Hill, 2020). Such facilities have previously been observed to facilitate research trainings in the areas of literature search, searching techniques, data analysis tools, and reference management as well as marketing of library resources and services (Si et al., 2019). Other research support infrastructure and tools are access to off-campus resources, electronic document delivery services (mostly through email), theses and books repositories and open access resources (Ali, et al, 2021; Rafiq et al., 2021)

## *Communication of research support activities to faculty members by academic librarians*

There appears to be differences between the services that the library provides and the way in which faculty members see these services (Fagan et al., 2022). This calls for a review of the ways through which academic librarians communicate the research support services they can offer to faculty members. Oguche (2018) posits that academic librarians could explore offering workshops, seminars, and conferences as a means of communicating research support services to faculty. Participation in college, faculty and university-wide workshops and seminars could be a starting point for academic librarians to showcase their support for faculty. This is a way of remaining relevant to the institutions. It has been observed that academic librarians have a positive mindset about using social media to communicate available research support services (AlAwadhi & Al-Daihani, 2019; Cheng et al., 2020).

## **Materials and Methods**

The case study research method was chosen for this study because it allows an investigator to explore a real-life, contemporary, bounded system (a case) or multiple bounded systems (cases) over time through detailed in-depth data collection involving multiple sources of information (Creswell, 2009). The mixed methods research design was used for this study. The purpose of the mixed method approach is that the combination of qualitative and quantitative research gives or provides a better understanding of a research problem than either research approach alone (Creswell, 2009). Questionnaires and structured interviews were the tools used for data gathering. Questionnaires were distributed to participants to collect data at the College of Health Sciences and the College of Basic and Applied Sciences. The data collection process lasted for six weeks due to the busy schedule of the lecturers. Permission was sought from the interview participants before any of the information from the interviews was recorded. Each interview session lasted for thirty-five minutes.

### *Population*

From the staff list, the total population of faculty members of the College of Health Sciences and the College of Basic and Applied Sciences was 669. At the time of study, there were 340 and 329 faculty from the two colleges respectively. There were 21 librarians from the

university library system. The population distribution of the two colleges is presented in Table 1.

**Table 1**

*Population of Faculty Members at the Colleges of Health Sciences and Basic and Applied Sciences*

<b>Name of College</b>	<b>Number of Faculty Members</b>
College of Health Sciences	340
College of Basic and Applied Sciences	329
<b>Total</b>	<b>669</b>

*Source: Colleges of Health Sciences and Basic and Applied Sciences Registry.*

### *Sampling*

Simple random sampling was used in selecting 363 faculty members from the College of Health Sciences and the College of Basic and Applied Sciences while purposive sampling was used to select seven librarians from the University of Ghana Library System. These librarians are seen as the key informants who have extensive knowledge about the libraries and their contributions to research activities. The librarians consulted for the study were the University Librarian, the Head of Electronic Resources, the Head of Student Reference, and the Head of Digitization and Institutional Repository Unit (all from the main University Library). The others were the librarian at the Medical School Library at Korle Bu, which is not on the main university campus (College of Health Sciences), the librarian at the School of Public Health (College of Health Sciences) and the librarian at the School of Agriculture (College of Basic and Applied Sciences).

### *Data Analysis*

Data was analyzed using the Statistical Package for Social Sciences (SPSS). The software was used to find the percentages, frequencies, mean values and standard deviations of the variables in the questionnaire. Interviews were recorded electronically by the authors, transcribed and presented under relevant themes in the article.

## **Results**

### *Profile of respondents*

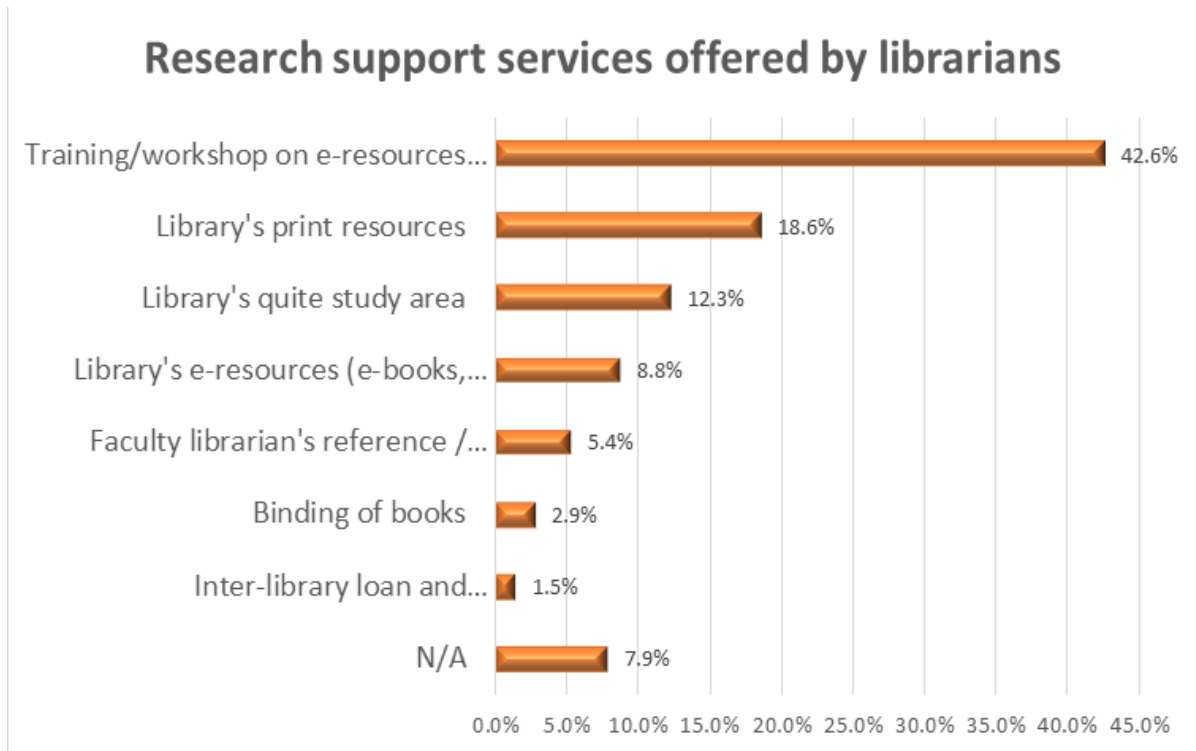
Two hundred and four valid responses were obtained, which represents 56.1% of the 363 participants contacted with the questionnaires. The majority of the respondents were lecturers, representing 43.1%. This was followed by senior lecturers who accounted for 28.9% of the respondents. Assistant lecturers constituted 16.6% and research fellows accounted for 0.5% of respondents. The highest educational levels of respondents were PhD (81%) and MA/MPhil/MSc. (19%). A total of seven librarians, six with MPhil and one with PhD were also interviewed. For anonymity, the academic librarians have been presented as R1, R2, R3, R4, R5, R6 and R7 in the data analysis.

### *Research support services offered by academic librarians to faculty members*

The study explores the research support services offered by librarians to faculty members in the two colleges under study. Faculty members were to choose from a list of research support services offered by librarians and accessed by faculty members. Figure 1 represents their responses.

**Figure 1**

*Research support services offered by librarians*



*Note: N/A (7.9%) represents respondents who did not indicate any research support service provided by the librarians.*

Through interviews with academic librarians in this study, the following research support services were revealed: article request services; training in reference management software such as Mendeley and Endnote; Faculty Research Commons for faculty members alone; provision of an institutional repository and training on the use of electronic databases. The academic librarians have been presented as R1, R2, R3, R4, R5, R6 and R7 for anonymity.

Academic Librarian one had this to say:

*R1: "We offer article request services; chat with the librarian; and also assign subject librarians to the various colleges and departments to liaise with faculty members and attend to their information needs."*



Academic Librarian two indicated that:

*R2: “We make sure faculty members and other users of the library enjoy our services such as providing them with access to the research publications; helping them search through the Online Public Access Catalogue (OPAC); reference management services for instance the use of Mendeley and Endnote; Faculty Research Commons are reserved for faculty alone, and Knowledge Commons are for undergraduates; and training on electronic databases.”*

Academic Librarian three stated that:

*R3: “Oh! We just offer basic reader services and referral services to our users. We give out books and as part of our referencing services, we direct users to appropriate literature for their research works. You know, we compliment the main university library which is the Balme Library.”*

Academic Librarian four indicated that:

*R4: “Our focal services are archiving research publications; student theses and publications within the university. It could be reports or presentations. We also have the institutional repository containing the publications of faculty members in the university.”*

Similar responses given by Respondents 5, 6 and 7 have been collated as follows:

R5, 6, & 7: We provide online and email services. A quiet place for users to read and learn has also been created. Training in the use of library catalogues and electronic database resources is another way of offering research support service to our faculty members.

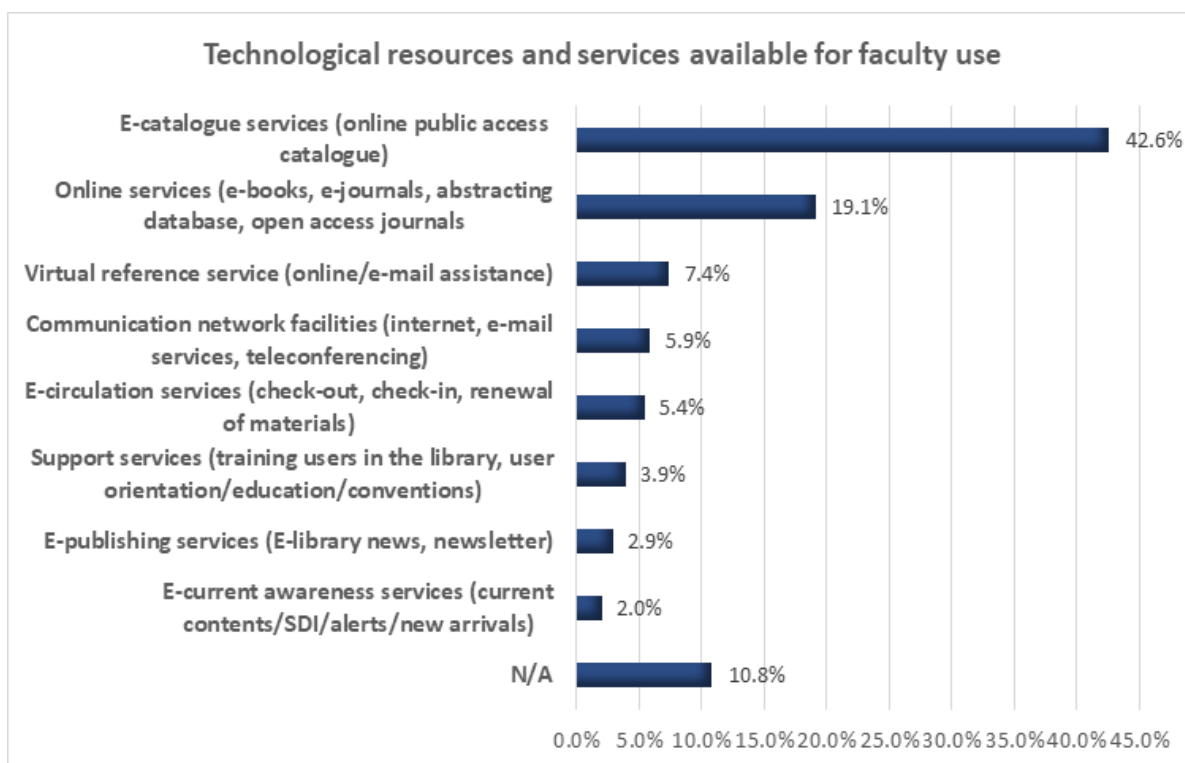
### ***Resources for research support services***

The availability of the necessary technological resources and services for research support for faculty in the College of Health Sciences and the College of Basic and Applied Sciences at the University of Ghana were ascertained in the libraries under study.

Faculty members were asked to indicate library technological resources and services available in their libraries to support their research activities. A total of eight different technological resources and services were identified during the survey. This ranged from electronic catalogue services, online services and virtual reference to communication network facilities, support services (user trainings), electronic publishing services, and electronic current awareness services. Figure 2 is a presentation of the resources.

**Figure 2**

*Technological resources and services available in the libraries for faculty use*



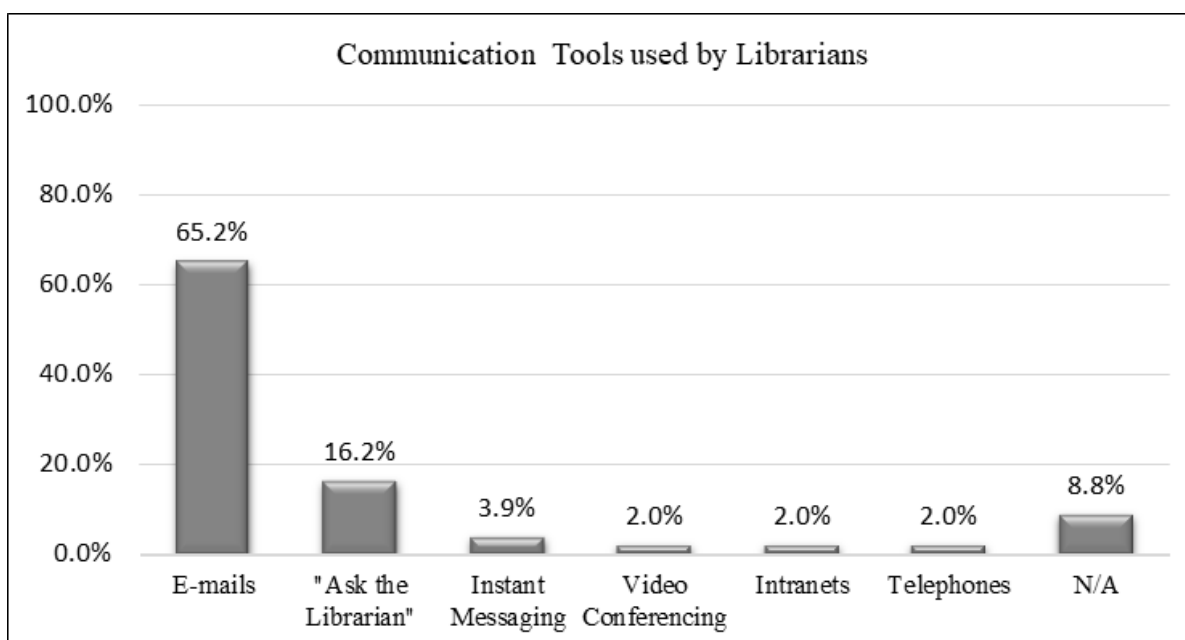
*Note: N/A (10.8)% in figure 2 represents faculty members who had no idea of the availability of the technological resources and services for research support in their libraries.*

*Communication of research support activities to faculty members by academic librarians*

To facilitate communication and interaction between faculty, staff and librarians, a number of communication tools are employed and used by the librarians. The survey revealed that six main communication tools or media are used to ensure communication between librarians and faculty members. The responses are presented in Figure 3.

**Figure 3**

*Communication Tools Used by the Librarians to Communicate Research Support*



*Note: N/A (8.8%) in figure 2 represent faculty members who had no idea of the mode of communication that existed between faculty members and the librarians.*

Findings from the perspective of lecturers suggest that electronic mail is the most popular mode of communication as indicated by 133 respondents (62.5%). This was followed by “Ask the Librarian” service, which recorded 33 (16.2%) responses per the data collected. Telephones were found to be the least used medium of communication as indicated by four respondents, representing 2.0% of all respondents. This finding was corroborated by three librarians through the interviews. The Librarians confirmed that they mostly used e-mails in communication. Responses from the interviews are as follows:

Communication tools used by librarians as indicated by academic librarian one are as follows:

*R1: "We communicate our services to the lecturers through the university library website and union group platforms for the lecturers such as University Teachers Association of Ghana (UTAG) WhatsApp platform. The Academic Quality Assurance Department of the university, which has contacts details of lecturers also helps in sending information across. Research support services are also made known during orientation programmes for deans and new academics. We also communicate our services during one-on-one or face-to-face interactions with lecturers".*

Academic Librarian 2 indicated that:

*R2: "We use notices at the Faculty Research Commons; subject librarians; electronic mails; telephones; intranet; online library chat system; Facebook; and the library website."*

Academic Librarian 4 highlighted communication tools used in their library as follows:

*R4: "We use the WhatsApp and text messages a lot to communicate with our faculty. I think, they love that and they quickly respond to the messages whenever we send them messages on these platforms. We use the emails also."*

Academic Librarian 5 mentioned the following tools.

*R5: "We use the email broadcast; telephones; intercom; face-to-face visitation; and Facebook."*

## **Discussion of Results**

### *Research support services offered by academic librarians to faculty members*

The findings in Figure 1 revealed that trainings and workshops on electronic resources and databases were the most popular research support service provided by the librarians. This is in line with the views that faculty members need support from academic librarians in areas such

as use of the institutional repository and electronic publishing (Howie & Kara, 2022; Ocran & Afful-Arthur, 2022). There were low responses for the provision of the library's print resources and quiet study area with 38 (18.6%) and 25 (12.3%) respectively. The 7.9% of faculty members who did not choose any research support service provided by the librarians may not have accessed the resources due to lack of interest or had no knowledge of their availability. In the view of this study, the upsurge of technology in library services as well as databases and other electronic platforms for research support, should compel faculty members to seek guidance from librarians. This is because advances in digital technology have given rise to many ways of disseminating research innovations and inventions resulting in the critical need for librarians who can manage library electronic resources as well evaluate the importance of databases for the research community (Kataria, 2014; Mi, 2015; Sarli & Carpenter, 2014).

Faculty members need support from academic librarians in areas such as use of the institutional repository and electronic publishing (Howie & Kara, 2022; Ocran & Afful-Arthur, 2022). Research data management and systematic or scoping reviews are some of the innovative services that complement other research support services from academic librarians (Walsh & Rana, 2020). Such services may not require face-to-face consultations. Academic librarians should primarily provide research support to faculty members throughout the whole research lifecycle, which includes the conception of the research, data processing and analysis, publication, sharing, and preservation of research findings, as well as curation of findings (Ketchum, 2017).

### *Resources for research support services*

Figure 2 shows that electronic catalogue service, that is the OPAC was the most utilized technological resource as indicated by 87 faculty members (42.6%). This was closely followed by online services such as e-books, e-journals, abstracts, databases, and open access journals as indicated by 39 respondents (19.1%). The popularity of such services could be attributed to the fact that scholarly communication has changed dramatically in the digital era and scientific communities are created more rapidly today than in the past (Fagan et al., 2022). The OPAC being the most utilized technological service could be attributed to its ease of use and its likelihood to be the first tool considered when searching for information about the library's collection. This view is in line with the submission by Ali et al. (2021) that academic library

websites are currently offering web pages that provide access to OPACs, electronic databases, peer-reviewed journals, reference service, and library resources, as well as subscriptions to online tools for research.

However, the least-used service according to the findings in this study were e-current awareness services such as current contents, selective dissemination of information (SDI), news alerts, new arrivals, and newspaper clippings. This could be attributed to low awareness on the part of the faculty members or limited marketing of such services by the librarians. It was therefore not surprising that support services such as training users in the type of services offered by the library, user orientation, and education was also rated poorly as indicated by eight faculty members (4.0%). It seems that most of the respondents were only aware of the traditional services provided by the libraries. Meanwhile a similar study conducted at the University of Cape Coast in Ghana by Ocran & Afful-Arthur (2021) showed that the growing popularity of databases has compelled most lecturers to seek knowledge on how to use them. The faculty members in the study by Ocran & Afful-Arthur therefore sought support in the use of institutional repositories and electronic publishing.

### *Communication of research support activities to faculty members by academic librarians*

Findings from both faculty and librarians revealed the use of e-mail services as the most popular means of communication. This mode of communication is seen to enable librarians reach a wider audience faster. Communication through telephones was found to be the least used medium. Although majority of the librarians in this study had not utilized social media such as WhatsApp to communicate with faculty, literature shows that academic librarians have a positive mind-set about using social media to communicate available support from academic librarians (AlAwadhi & Al-Daihani, 2019; Cheng et al., 2020). Only academic librarian four (4) mentioned it's use. This could therefore be utilized by academic librarians in the two colleges studied.

## **Conclusion**

This article explored the availability and relevance of research support offered by

academic librarians to faculty members within the Colleges of Health Sciences and Basic and Applied Sciences at the University of Ghana. This study concludes that research support activities by academic librarians are available at the colleges under study in this article and are relevant to faculty members. The OPAC was the most utilized research support tool. Selective dissemination of information (SDI) services, news alerts, new arrivals, and newspaper clippings were the least utilized services. The study also revealed that the most active communication channel between faculty members and the librarians was e-mail. Training and workshops on the use of electronic resources and databases was listed as the most popular research support service by the academic librarians to faculty members but the findings revealed that such trainings were less utilized by faculty members of the College of Health Sciences and the College of Basic and Applied Sciences at the University of Ghana.

## **Recommendations**

The library should evaluate the research needs of faculty periodically to be able to provide the needed research support. This could be done at the beginning of every semester through online surveys.

Academic libraries should employ marketing mechanisms and strategies to advertise the availability of services unfamiliar to or underutilized by faculty members and other users. The “new normal” method of offering library services (primarily virtual services) can be utilized for research support. This can be done through the effective use of the university library website and social media platforms for announcements, updates on services and as a means for faculty to present their requests. Links to information and updates on academic library websites on research support could also be sent on regular basis into email addresses of faculty members as well as through social media platforms.

The capacity of librarians (both in terms of human resource and e-resources) should be enhanced in order to equip them to have better interactions with faculty members at the College of Health Sciences and College of Basic and Applied Sciences. Presentations on available research support services should be made by librarians at faculty seminars, departmental staff meetings and workshops on research.

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