Bridging the Great Divide: Librarian-faculty Collaboration in Selected Higher Institutions in Lagos State Nigeria

Adefunke O. Alabi

Readers Services Department, University Library, University of Lagos, P.M.B. 1012, Akoka, Lagos, Nigeria

ABSTRACT

This paper examines librarian-faculty collaboration in selected academic libraries in Lagos State, Nigeria. Simple random sampling method was used to select five out of a total population of nine higher institutions in Lagos State. Questionnaire was used as the major instrument for data gathering among librarians in the selected institutions. The study found that librarians are willing to collaborate with faculty in the areas of providing Current Awareness Services (CAS), working with accreditation teams, and helping to develop both the media and information literacy skills of students. The study also found that librarians believe that faculty board meetings and library committee initiatives are effective platforms for promoting librarian faculty collaboration. Further, the study identified essential skills for librarian-faculty collaboration. Overall, findings show that a weak negative correlation exists between gender and area of collaboration at $N = 38$, $r = -0.136$, $p < 0.05$. The survey also found a significant weak negative relationship between age and area of collaboration ($N = 38$, $r = -0.379$, $p < 0.05$). No significant relationship was found between work experience and area of collaboration ($r = -0.067$, $p = 0.696 > 0.05$). The study therefore suggests that stakeholders in higher education should imbibe the culture of expanding and strengthening collaboration between librarians and faculty.

Introduction

In most institutions of higher learning, little or no interaction tends to exist between librarians and faculty. These are academics who are lecturers in higher institutions of learning. Faculty are mostly unaware of what librarians do, as the majority see librarians as no more than book custodians and information service providers. In fact, librarians engage in research, publishing, administration and teaching. It has been suggested in the literature that faculty members hardly view librarians as their academic counterparts or as vital entities in the academic scenery (Nilsen, 2012). This great divide between librarians and faculty has been associated with a culture of seclusion among faculty (Christiansen, Stombler, & Thaxton, 2004), especially in light of the perception that librarians only provide information services (Phelps & Campbell, 2012). A major for this image perversion is that many faculty have not felt the impact of librarians (Doskatsch, 2003). To overcome this anomaly, Matthies (2004) suggests that academic libraries need to collaborate more actively with faculty.

Collaboration involves two or more people working together towards achieving common goals by sharing knowledge (Lomas, Burke, & Page, 2008). The responsibility for reinforcing collaborative initiatives between the library and faculty lies mainly with librarians. If the academic community must stop regarding librarians as mere service providers, then it behoves librarians to take the profession beyond service provision (Nalani Meulemans & Carr, 2013). No doubt, one of the ways of achieving this is through partnering with faculty, i.e. all the academics or lecturers in various departments in the university. Most academic libraries have taken several initiatives to promote collaboration between librarians and faculty. For instance, in the United States of America, some academic libraries have integrated information literacy into the curriculum. Where collaboration between librarians and faculty exists, there is bound to be effective communication and interaction (Qobose, 2000), improved staff efficiency, cross-pollination of ideas and sharing of efforts (Carnwell & Carson, 2008).

In higher institutions of learning, librarian-faculty collaboration is an essential component of effective library instruction, collection development and development of information, as well as research literacy competency. Additionally, faculty becomes more conscious of the expertise and abilities of academic librarians (Ducas & Michaud-Oystryk, 2003). However, Winner (1998) argues that collaboration between librarians and faculty will be meaningful only when the interaction leads to incorporating the library into all components of curriculum planning. It has not been definitively established in the literature that academic librarians are ready for collaborative efforts with faculty in Nigerian higher institutions. However, literature from elsewhere shows that faculty-librarian collaboration in tertiary institutions has focused on

teaching information literacy (Reed, Kinder, & Cecile, 2007), collection development (Shen, 2012) and attitude of faculty towards collaboration (Yousef, 2010). Generally, the existing literature points to the need for collaboration between academic librarians and faculty for higher productivity in relation to teaching and research, regardless of the inherent challenges involved in actualising this need on a sustainable basis. Consequently, the aim of this study is to examine how librarians can collaborate sustainably with faculty in Nigerian higher institutions. Answers are thus proffered to the following research questions:

1. What area of collaboration with faculty do librarians consider important?
2. What should be the platform for collaboration between librarians and faculty?
3. What special skills do librarians require in order to optimise such collaboration?

Hypotheses

The following hypotheses are tested:

1. There is no significant relationship between gender and area of collaboration.
2. There is no significant relationship between age and area of collaboration.
3. There is no significant relationship between work experience and area of collaboration.

Significance of the study

In practice, this study would inform policymakers in relevant institutions on approaches to librarian-faculty collaboration. It will also outline innovative strategies for developing policy frameworks at the national, regional and international levels for promoting partnerships between librarians and faculty. Furthermore, the study will provide baseline data for improvement in librarian-faculty collaboration initiatives not just in Nigeria but also in other African countries with similar contextual settings where there is a need to develop such relationships. The study will also specify the requisite skills needed for collaboration. Overall, the study will contribute to bridging the gap between librarians and faculty, by promoting willingness to participate in formal, joint working relationships in order to ensure that both faculty and librarians contribute to the shared vision of the institution.

Literature review

Academic librarians have been found to collaborate with faculty through curriculum planning, information literacy/library instruction and liaison librarian initiative (Abu Bakar, 2009; Black, Crest, & Volland, 2001). The use of liaison librarian initiative in promoting collaboration between the librarians and faculty is well articulated in the literature (Rodwell & Fairbairn, 2008). The literature clearly spells out the roles of liaison librarians to include facilitating training for both faculty and students; developing library instruction programmes; collection development; curriculum development and provision of accreditation reports (Mozenter, Sanders, & Welch, 2000).

The new frameworks for liaison librarians are the embedded or engaged liaison librarian model and the hybrid model. In the engaged liaison librarian model, the academic librarian seeks to understand how faculty in a particular discipline communicate and share information with a view to enhancing their research productivity (Jaguszewski & Williams, 2013). This model allows librarians and faculty to cooperate in course design, thus leading to good delivery and assessment of subject content (West-Pawl, 2012). According to Jaguszewski and Williams (2013), the hybrid model is the dominant trend worldwide, as it allows liaison librarians to work with functional specialists both

within and outside the library. For example, the University of Guelph has embraced the functional specialist innovation. Functional specialists are individuals who have no liaison responsibilities in specific academic departments but serve as "super liaisons" to other librarians and to the entire campus. Functional specialists are proficient in areas such as copyright, Geographic Information Systems (GIS), media production and integration, distributed education or e-learning, data management, emerging technologies, user experience, instructional design, and bioinformatics. No matter the framework adopted in the academe, the aftermath of the liaison librarian initiative is increased communication between faculty and librarians, increased awareness about library resources and services, and a trusted contact person the faculty can easily and freely relate with (Kwadzo, 2014; Thull & Anne Hansen, 2009).

At the University of Manitoba, Ducas and Michaud-Oystryk (2003) examined librarian-faculty interaction. The study found that faculty highly approves a greater level of interaction with librarians in areas such as information services, collection development, information technology, research, and teaching instruction. Similarly, Yousef (2010) identified areas of collaboration between faculty and librarians to include collection development and information literacy. However, he noted that faculty prefers to collaborate with librarians in the area of collection development. Additionally, Bruce (2001) observed that librarian-faculty collaboration could also be achieved through partnership in research, policy development, curriculum design, students' supervision and academic development. However, for such a relationship to thrive well, there must be shared understanding of how the expertise of both parties will enhance students' capacity for learning and research.

Bendriss, Saliba, and Birch (2015) outlined the importance of collaboration between librarians and faculty to include librarians becoming more visible and accessible to faculty and students. Such collaboration also helps to overcome some of the obstacles students encounter in their research engagements, such as inability to use citations correctly as well as inability to effectively review electronic sources and engage more confidently in scholarly writing. Bendriss et al. (2015) argued that librarian-faculty collaboration makes plagiarism less challenging to teach students. From the foregoing, therefore, it can be said that collaboration with faculty provides librarians with the opportunity to demonstrate the value of the library in educational environs.

Recent literature shows that collaboration between librarian and faculty is worthwhile (McNee & Radmer, 2017; Pautz & Gauder, 2017). It is argued that librarian-faculty collaboration results in great improvement in students' information literacy, coursework and engagement in learning, with faculty becoming more conversant with the latest library databases and other information resources. It is maintained that students would realise the usefulness of research guides as well as databases and other information resources, in addition to being able to evaluate the credibility of sources of information and do much more than just 'googling'. It suffices to note that collaboration between librarians and faculty depicts best practices in information literacy education (Douglas & Rabinowitz, 2016). It is therefore important that librarians collaborate with faculty in order to strengthen students' overall academic success (Massis, 2012).

Henneman, Lee, and Cohen (1995) observed that the relationship between collaborators is usually non-hierarchical. In other words, there is no superior partner in such a relationship, as trust and respect are prerequisites for the success of such relationships (Hudson, Exworthy, & Peckham, 1998). Support for this view also comes from Brasley (2008), who added that shared vision and mutual respect are equally essential for collaboration. Kenedy and Monty (2011) explained that such relationship should be symbiotic in nature. It is therefore important to emphasise that collaboration is different from cooperation, since the latter requires willingness on the part of both parties to create meaningful relationships (Douglas & Rabinowitz, 2016).

Lindstrom and Shonrock (2006) suggest that collaboration between librarians and faculty would be meaningful when the library is integrated into all elements of curriculum planning, such that the library becomes an indispensable component of students' formal and informal education. McCue (2014) states that librarians need to have strong working relationships with faculty who are in charge of courses where information literacy instruction is taught or is to be taught. Similarly, Matthies (2004) notes that in order to achieve successful collaboration with faculty, librarians must be proactive.

According to Touchard and Helms (2003), many academics are not interested in collaborating with librarians in teaching library instruction because it takes time. Similarly, McNee and Radmer (2017) found that librarians and faculty are extremely busy and do not have time for collaboration. Yet, collaboration is only impactful when both librarians and faculty have time to meet, plan and discuss common goals. McNee and Radmer (2017) therefore suggest that librarians should have flexible schedules that allow for collaboration with faculty. Kissel et al. (2016) suggests that Community of Practice (CoP) is a good initiative for overcoming impediments to collaboration, such as the differences in language, perception and focus that arise from the role they play in the university.

For Lapidus (2009) librarian-faculty collaboration has positive impact, especially in the teaching of library instruction to students. Douglas and Rabinowitz (2016) surveyed the relationship between faculty-librarian collaboration and students' demonstrated information literacy (IL) abilities in a First Year Seminar (FYS) course at St. Mary's College, Maryland. Findings revealed that nearly all the faculty included at least one IL-related assignment in their seminar; a majority of the faculty gave the liaison librarian a copy of their syllabus; about 67% requested assistance from their liaison librarian; more than half of the faculty interacted with their liaison librarian before the start of the semester; and 58% deliberated and gave their liaison librarians copies of seminar assignments. A basic conclusion reached in Douglas and Rabinowitz (2016) is that no matter how challenging it is to initiate and sustain librarian-faculty collaboration, its overarching importance in improving students' research and information literacy abilities cannot be stressed enough. The authors therefore insist that librarian-faculty collaboration is important in this twenty-first century.

In a private university in the United States of America, Anderson (2016), using the qualitative approach that involved use of interview, studied collaboration between faculty and librarians. The study examined how faculty and librarians might best collaborate on designing a first-year undergraduate curriculum that integrates teaching of information literacy skills. The author argued that this initiative is valuable for promoting development, growth, critical thinking skills and lifelong learning among undergraduate students. Therefore, stakeholders in higher institutions as a matter of necessity, encourage librarians to collaborate with faculty (Bendriss et al., 2015). According to Auckland (2012), nine skills are fundamental in achieving and sustaining collaboration between librarians and faculty. But Kwadzo (2014) argued that the most important skills are: communication skills; presentation and teaching skills; team work and team building skills; project management skills; flexibility; marketing skills; persuasion and influencing skills; and research guidance for individuals.

Previous studies have observed that seeking and sustaining collaborative relationships with faculty is beneficial. However, the collaboration critique literature argues that the library profession is not yet ready for comprehensive collaborative effort (McCarthy, 2002). Moreover, there is status division between librarians and faculty (Christiansen et al., 2004; Loesch, 2017). In overcoming this psychological problem, librarians should actively seek partnerships with faculty, especially in teaching of information literacy skills to students (Leeder, 2011). Another school of thought argues that academic librarians must continually pull their weight by portraying the image of the profession well.

Methodology

The population of the study comprised academic librarians in higher institutions in Lagos State, Nigeria. Lagos State was chosen because of its cosmopolitan nature and relatively high number of tertiary institutions. The survey research design was adopted for the study because it is capable of providing a numeric description of attitudes or opinions of a population by studying a sample of that population (Creswell, 2014). Using the simple random sampling method in the choice of population, five out of nine higher institutions located in Lagos State were selected, viz.: University of Lagos (UNILAG), Lagos State University (LASU), Yaba College of Technology (YABATECH), Federal College of Education, Akoka (FCE) and Adeniran Ogunsanya College of Education (ACOED). The sampling size and procedure of study was premised on the total enumeration technique of all academic librarians in the five selected academic libraries. The study adopted the total enumeration technique because obtaining data from the entire population is achievable and within the available budget for the study. The major tool for data collection was a self-developed questionnaire.

Internal consistency of the instrument

The internal consistency of the instrument was determined by pre-testing the instrument among ten (10) academic librarians from one higher institution that is not part of the population but which has similar characteristics. The reliability coefficient was computed using Cronbach's alpha (α) analysis to ascertain clarity of questions, internal consistency and overall reliability of constructs in the study. The overall Cronbach value for the instruments was 0.90, which indicates that the questionnaire has satisfactory internal validity (McKinley, Manku-Scott, Hastings, French, & Baker, 1997). The reliability coefficient for each of the constructs in the study is shown in Table 1.

Questionnaire administration

Copies of the questionnaires were given to academic librarians in the selected higher institutions. The questionnaire elicited information on personal data, area of collaboration with faculty, platforms for collaboration and skills required for collaboration with faculty by librarians. The descriptive data were analysed using the Statistical Package for the Social Sciences (SPSS), which shows frequency counts, percentages and mean scores, while the hypotheses were tested using Pearson's Product Moment Correlation Coefficient (PPMC) at a 0.05 level of significance.

Results

Response rate

Of the 59 copies of the administered questionnaire, 42 were returned, giving a response rate of 71%, although only 38 of the 42 were found usable. Table 2a shows the response rate from each institution.

Demographic characteristics of respondents

The demographic characteristics of respondents are presented in

Table 1
Internal consistency of the instrument.

	Cronbach's alpha	No of items
Area of collaboration	0.912	12
Platform of collaboration	0.519	6
Skills	0.942	10
Overall	0.901	28

Table 2a
Response rate by institution.

Characteristic	Category	Type of institution	Frequency (n = 38)	Percent (%)
Institution	UNILAG	FU	10	26.3
	YABATECH	FP	11	28.9
	LASU	SU	10	26.3
	FCE, Akoka	FCOE	3	8.0
	ACOED	SCOE	4	10.5

KEY: FU = Federal University, FP = Federal Polytechnic, SU = State University, FCOE = Federal College of Education, SCOE = State College of Education.
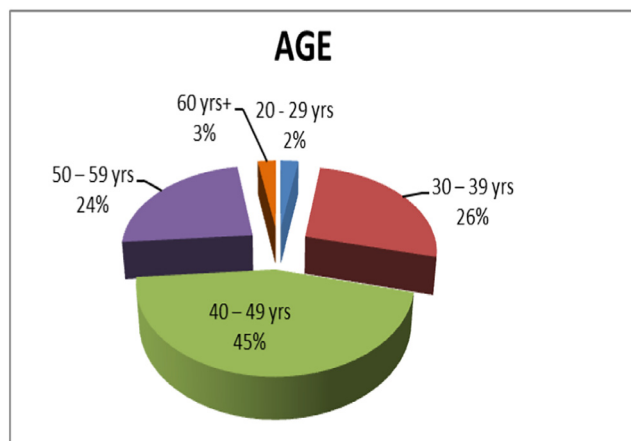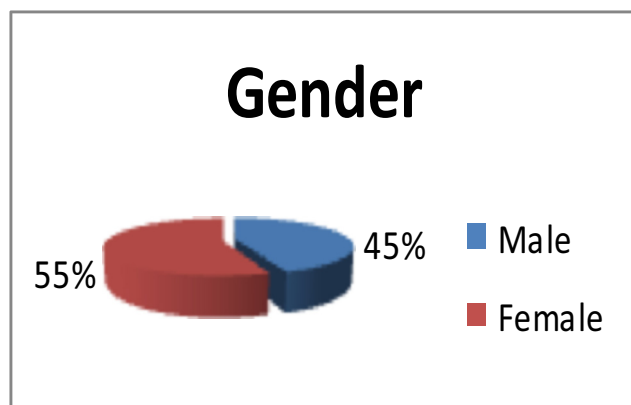

Fig. 1. Age distribution of respondents.

Fig. 2. Gender distribution of respondents.
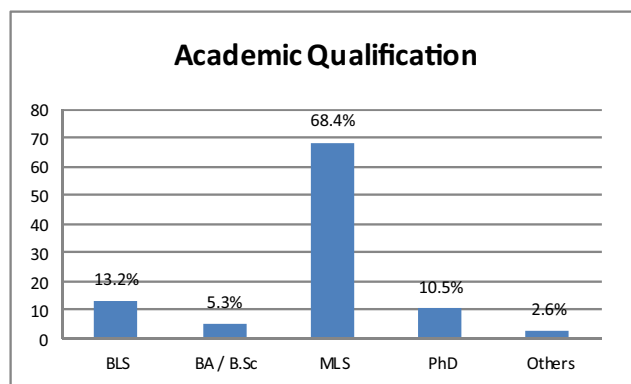

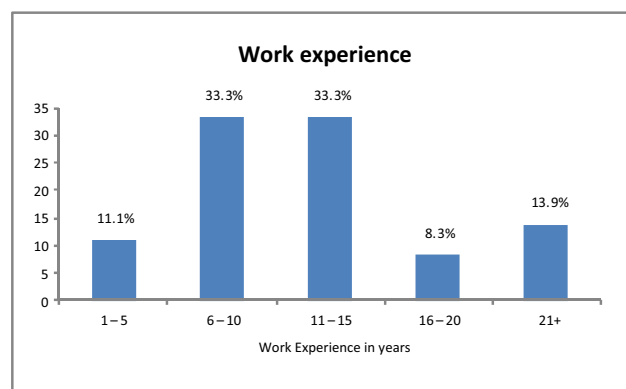**Fig. 3.** Academic qualification of respondents.
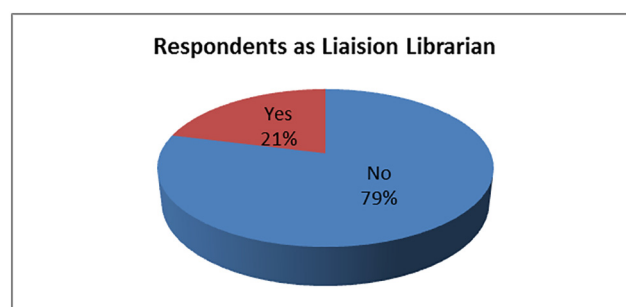

Fig. 4. Work experience of respondents.

Fig. 5. Respondents as liaison librarian.

Figs. 1-5. The distribution of the respondents, based on their age, showed that 2% of the respondents were < 30 years old, 26% were between 30 and 39 years old, while 24% were between 50 and 59 years old. Majority of the respondents (45%) were between 40 and 49 years old, while only 3% were 60 years and above as shown in Fig. 1.

Previous studies have shown that age is positively related to collaboration, such that as the average age of team members increases, the quality of the teamwork also increases (Gellert & Kuipers, 2008). As far as respondents' demographics are concerned, in terms of gender the descriptive analysis in Fig. 2 shows that 21 (55%) of the samples were females and 17 (45%) were males. Findings further showed that well over half of the respondents (68.4%) were Master degree holders in Library and Information Science, as depicted in Fig. 3. Moreover, a greater number of the respondents (66.6%) had between 6 and 15 years' work experience, as shown in Fig. 4. As regards the profile of the respondents, Table 2b showed that the majority, i.e. 12 (32.0%), of the respondents were Librarian I, 11 (29.0%) were Senior Librarian, while 7 (18%) were Librarian II and 8 (21%) were Assistant Librarian. Further findings revealed that a majority of the respondents (78.9%) were not Liaison Librarians, while the remaining 21.1% are currently Liaison Librarians as shown in Fig. 5.

Area of collaboration with faculty

Academic librarians were asked to specify the most important area

Table 2b
Profile of respondents.

Characteristic	Category	Frequency (n = 38)	Percent (%)
Profile	Assistant Librarian	8	21.0
	Librarian II	7	18.0
	Librarian I	12	32.0
	Senior Librarian	11	29.0
	Others	Nil	Nil

Table 3
Area of collaboration with faculty.

	Important		Not sure		Not important		Mean ± SD
	Freq.	%	Freq.	%	Freq.	%	
Provision of specialised assistance in collection development	26	68.4	5	13.2	7	18.4	3.74 ± 1.4
Provision of specialised reference service for faculty	26	68.4	5	13.2	7	7.3	3.89 ± 1.3
Provision of information alert services	26	68.4	7	18.4	5	13.2	3.82 ± 1.2
Notifying faculty on new titles and latest library development (Current Awareness Services)	32	84.2	4	10.5	2	5.3	4.24 ± 1.0
Development of guide to resources and services in the library	26	68.5	7	18.4	5	13.2	3.89 ± 1.4
Giving advice to faculty especially in the area of library policy	27	71.1	5	13.2	6	15.8	3.84 ± 1.3
Developing the research skills of students at the undergraduate and graduate levels	26	68.4	4	10.5	8	21.1	3.82 ± 1.4
Developing the information literacy skills of students at all levels	27	71.0	4	10.5	7	18.4	3.95 ± 1.4
Developing research literacy skills of both undergraduate and graduate students	27	71.0	7	18.4	4	10.5	4.03 ± 1.1
Preparation for accreditation of academic programmes	31	81.6	2	5.3	5	13.2	4.16 ± 1.2
Integration of social media into teaching	17	44.7	7	18.4	14	36.8	3.00 ± 1.5
Curriculum development or planning	17	44.7	7	18.4	14	36.8	3.00 ± 1.5

Grand mean = 3.78 ± 1.31.

Table 4
Platform for collaboration between librarians and faculty.

	Great extent (%)	Little extent (%)
Faculty board meeting	33 (86.8)	5 (13.2)
Library exhibition programmes	28 (73.7)	10 (26.3)
Curriculum committee	20 (52.6)	18 (47.4)
Information literacy skills instruction programmes	30 (78.9)	8 (21.1)
Research partnership	30 (78.9)	8 (21.1)
Faculty Library committee meetings	33 (86.8)	5 (13.2)

of collaboration with faculty. As shown in Table 3, academic librarians are more interested in collaborating with faculty in the following four major areas: collection development including faculty notification of additions to library collections; preparation for accreditation of programmes; developing research literacy skills and information literacy skills of students at all levels; and provision of specialised reference services to faculty. The item that has the least mean ($\bar{x} = 3.00$) was collaboration with faculty on curriculum development planning.

Platform for collaboration between librarians and faculty

The study required academic librarians to provide information on platforms that might facilitate partnership between them and faculty. As indicated in Table 4, findings show that majority of the respondents (86.8%) were of the opinion that faculty board meetings and faculty library committee initiatives (86.8%) could easily aid librarian-faculty collaboration in the university. Furthermore, majority (78.9%) of the respondents further indicated that information literacy skills instruction

programmes and research partnerships would greatly enhance librarian-faculty collaboration in the academe.

Skills required by librarians for collaboration with faculty

Table 5 shows the distribution pattern of the responses on the skills that are required for collaboration with faculty. Findings show that research ability, which has the greatest mean score ($\bar{x} = 4.32$ SD ± 1.2), is considered the most important skill for librarian-faculty collaboration, followed by presentation skills ($\bar{x} = 4.26$), communication skills ($\bar{x} = 4.24$) and ICT skills ($\bar{x} = 4.21$).

Hypotheses testing

The relationship between demographic characteristics, i.e. age and work experience, and area of collaboration were tested using Pearson's Product Moment Correlation Coefficient (PPMC) at a 0.05 level of significance. The decision rule is that if the *p*-value is < 0.05 ($p < 0.05$), then the hypothesis is rejected and if the *p*-value is > 0.05 ($p \geq 0.05$), then the hypothesis is then accepted.

Hypothesis 1. There is no significant relationship between gender and area of collaboration. Table 6 shows the result of the correlation analysis testing the relationship between gender and area of collaboration.

The result in Table 6 shows that a weak negative correlation exists between gender and area of collaboration, at $N = 38$, r = −0.136, $p < 0.05$; therefore, the correlation is not significant and the null hypothesis should be accepted. This implies that there is no difference between both male and female librarians on areas of collaboration with

Table 5
Skills required by librarians for collaboration with faculty.

Skills	Important		Not sure		Not important		Mean ± SD
	Freq.	(%)	Freq.	(%)	Freq.	(%)	
Teaching	27	71.1	8	21.1	3	7.9	4.03 ± 1.0
Evaluation	32	84.2	1	2.6	7	13.2	4.13 ± 1.2
Communication	32	84.2	2	5.3	4	10.5	4.24 ± 1.2
Problem solving	31	81.6	4	10.5	3	7.9	4.16 ± 1.0
Information literacy	29	76.3	5	13.2	4	10.5	4.13 ± 1.0
Subject expertise	26	68.4	6	15.8	6	15.8	3.92 ± 1.4
Analytical ability	31	81.6	4	10.5	3	7.9	4.13 ± 0.9
Research ability	32	84.2	2	5.3	4	10.5	4.32 ± 1.2
Presentation	30	79.0	3	7.9	4	10.5	4.26 ± 1.0
ICT	31	81.6	3	7.9	4	10.5	4.21 ± 1.2

Table 6
Relationship between gender and area of collaboration.

Variables	N	r	P	Remark
Gender Area of collaboration	38	−0.136	0.415	Not sig.

Table 7
Relationship between age and area of collaboration.

Variables	N	r	P	Remark
Age Area of Collaboration	38	−0.379	0.019	Sig.

Table 8
Relationship between work experience and area of collaboration.

Variables	N	r	P	Remark
Work experience Area of collaboration	38	−0.067	0.696	Not sig.

faculty. Both male and female librarians are willing to collaborate with faculty in areas such as collection development, preparation for accreditation of programmes, developing the research literacy skills and information literacy skills of students at all levels, and providing specialised reference services.

Hypothesis 2. There is no significant relationship between age and area of collaboration.

Table 7 shows the result of the correlation analysis testing the relationship between age and area of collaboration.

The result in Table 7 indicates a significant negative relationship between age and area of collaboration, at $N = 38$, $r = −0.379$, $p < 0.05$; the hypothesis is therefore rejected. The implication of this finding is that age has influence on those areas where librarians are willing to collaborate with faculty.

Hypothesis 3. There is no significant relationship between work experience and area of collaboration.

The result in Table 8 shows that there was no significant relationship between work experience and area of collaboration, at $r = −0.067$, $p = 0.696 > 0.05$; the hypothesis is therefore accepted. This implies that librarians' years of work experience has no influence on area of collaboration with faculty. This therefore suggests that librarians who are young in the profession and their older colleagues are willing to partner with faculty. Collaboration with faculty is of concern to academic librarians in spite of years of experience on the job.

Discussion

This study has found that academic librarians strongly approve of collaboration with faculty, through provision of information on recent additions in the library's collection and provision of information on latest developments in the library. This finding differs from that of Yousef (2010) who found faculty giving preference to collaboration in the area of collection development. In the Library and Information Science (LIS) discipline provision of information on recent additions in the library's collection and on latest developments in the library is better known as Selective Dissemination of Information (SDI). It is a kind of library service where the right information is delivered to the right person and at the right time. Through SDI, academic librarians give personal attention to faculty and, by so doing, are able to target and meet the information needs of faculty. Tripathi (2014) found that academic librarians are able to establish long-term bonding with faculty

through SDI. This observation is reinforced by Chaddha (2009), who found that through SDI librarians can achieve partnership with faculty and that, consciously or unconsciously, faculty become involved in library collection development activities.

The study also found that academic librarians are willing to collaborate with faculty for adequate preparations for the National Universities Commission (NUC) accreditation of courses. According to Onwudinjo (2015), accreditation is a tool used worldwide to monitor, assess and evaluate the standards and quality of academic programmes and their curricula in tertiary institutions. In Nigeria, academic librarians play a central role during accreditation of programmes. This role is further reinforced by the NUC benchmark scheme for programmes, which stipulates 70% as the minimum score for library information materials or the collection holdings for every academic programme. In this regard, librarians ensure that materials adjudged relevant to programmes being accredited are selected, arranged and labeled for the inspection of the accreditation team members, who are usually academics picked by the NUC from other universities. Prior to the team's arrival, faculty members would visit the library to assess the collections, in a kind of mock self-accreditation. On such occasion, both the librarian and faculty would work as a team in order to ensure successful accreditation. Issues such as study space, lighting system, ventilation and overall library services all constitute parameters for accreditation. In ensuring a hitch-free accreditation exercise, libraries must have collection development policies that guide the selection and acquisition of resources for each programme (Onwudinjo, 2015). Such collection development policies can only be developed successfully in line with the curriculum through librarian-faculty collaboration.

The study further found that librarians are willing to collaborate with faculty on developing the information literacy skills of students at all levels, as also previously found by Black et al. (2001). With the permeation of digital technology across programmes and disciplines, it can only be observed that the concept of digital literacy is more embracing than the narrow understanding of information literacy, which is about information identification and sources, including usage. In other words, one critical area of collaboration between the librarian and faculty will be in the area of digital literacy being transferred by the former to the latter, including students. It is in this context that one can have further insight into the relationship between age, work experience and willingness to collaborate. For instance, younger librarians with relatively young work experience are much more willing to collaborate with faculty than their older colleagues. This trend can be explained in the context of digital literacy, which is generation-driven. Younger individuals appear more technology-savvy than their senior colleagues. Gilman, Sagàs, Camper, and Norton (2017) make the point that faculty would miss out on academic librarians' knowledge, perspectives and expertise in institutions where partnership between the two is not sought when designing information literacy instruction in higher institutions of learning.

Lindstrom and Shonrock (2006) observed that librarians are using co-instructors in courses, learning communities and campuswide information literacy initiatives for promoting collaboration with faculty. Therefore, the result of the present study strengthens the findings in the literature that collaboration between librarians and faculty is the most effective way for aiding students' acquisition of information literacy skills (Parker, 2003). Librarians, by virtue of their training and exposure on the job, are well informed about research, bibliography searches, information retrieval and diverse citation formats; similarly, no other professional is better positioned to teach students research and information literacy skills. Moreover, librarians thoroughly understand the register of information literacy. In the opinion of Gardner and White-Farnham (2013), librarians should establish themselves more and more as information literacy experts and use this expertise for collaboration with faculty.

But this study has also found that librarians are not particularly interested in collaborating with faculty on curriculum development.

This could be because curriculum development has always been the holistic responsibility of faculty. Yet the role and significance of collaboration between librarian and faculty in curriculum development planning has been recognised in the literature (see Sacchanand, 2012). Faculty can key into the knowledge gained over time by librarians in the process of raising competent graduates. Interestingly, however, faculty have been found to collaborate with librarians in the area of library policy formulation by being appointed as members of library boards. Such appointments have availed many faculty opportunity to appreciate librarians' many challenges.

Findings further show that majority of the respondents were of the opinion that certain platforms would best promote collaboration between librarians and faculty. Faculty board meetings and faculty library committee initiatives were thought to be such suitable platforms. Qobose (2000) found that partnership between librarians and faculty can be successfully realised through formal committee structures such as Faculty Board, Faculty Executive, Faculty Research, and Graduate Studies. The author points out that such committees would foster professional collaborations such as joint authorship of scholarly research in journals and books as well as functioning as resource persons at workshops and trainings within and outside the university.

The standards stipulated by the Association of College and Research Libraries (ACRL) require that universities worldwide grant faculty status to academic librarians (Mitchell, 1989). Faculty status enables librarians to enjoy the same conditions of service and promotion criteria given to academics. Some of the advocates of faculty status for librarians include Murray-Rust (2005) and Gorman (2003). Murray-Rust (2005) argued that with faculty status, librarians would find it easy to earn the respect of their faculty peers and administrators. Moreover, librarians would become veritable academics and capable partners in the shaping of teaching and research. With faculty status, librarians now have improved status and recognition within the academe, serving as members of senate and forging closer relationships with faculty (Hosburgh, 2011). Hosburgh is strongly convinced that faculty status for librarians will lead to more effective collaboration between faculty and librarians. Wyss (2010) and Loesch (2017) have equally pointed out that librarians will have further opportunities to network with colleagues in the faculty by serving in university governance.

Further findings show that research ability, which has the greatest mean score, i.e. $\bar{x} = 4.32$ SD $\pm$ 1.2, is considered the most important skill for librarian-faculty collaboration. This is followed by presentation skills ($\bar{x} = 4.26$), communication skills ($\bar{x} = 4.24$) and ICT skills ($\bar{x} = 4.21$). These findings differ from that of Abu Bakar (2009), who found that academic librarians require mostly information literacy and communication skills in order to collaborate with faculty. To be sure, the purpose of academic libraries has always been to support the curricular and research needs of the institution (Nalani Meulemans & Carr, 2013). These findings suggest that librarians need to devote more attention to improving their research competency.

This study reveals a weak negative correlation between gender and area of collaboration, at $N = 38$, $r = -0.136$, $p < 0.05$; therefore, the correlation is not significant. Some other studies have shown that women tend to be more collaborative than men (Pounder & Coleman, 2002). Besides, women exhibit more positive interpersonal styles than men (Eagly & Johnson, 1990). In a meta-analysis of studies comparing men and women in terms of interpersonal styles, men were reported to exhibit more social dominance-related behaviour than women (Dovidio, Brown, Heltman, Ellyson, & Keating, 1988) as well as being more autocratic than women (Eagly & Johnson, 1990). Although the majority of the respondents in this study were women, these different interpersonal styles between men are women fail to explain the disparity between the findings of this study and previous ones. Instead, the divergent findings between this study and other previous studies can be explained based on the focus of the study, which stresses understanding the correlation between gender and the dimensions of collaboration

that librarians are seeking with faculty. It is thus not surprising to discover that both male and female librarians are willing to collaborate with faculty in the following dimensions: collection development; preparation for accreditation of programmes; developing research literacy skills and information literacy skills of students at all levels, and provision of specialised reference services. The willingness of librarians to collaborate in these areas may be described as collective intelligence. Losada and Heaphy (2004) have suggested that collective intelligence manifests in patterns of behaviour. In essence, no disparity was found in the disposition of both male and female librarians towards the kind of collaboration they seek with faculty. Evidence from the literature suggests that collaboration is greatly improved by a show of collective intelligence in a team (Woolley, Chabris, Pentland, Hashmi, & Malone, 2010).

Age, however, was found to have significant influence on areas of collaboration. The explanation for this finding could be gleaned from the study by Dale, Leharne, Knight, and Marshall (2006), who found that collaboration between librarians and faculty is affected by demographic variables. This finding implies that age diversity is important when considering collaboration between librarians and faculty. Similarly, Gellert and Kuipers (2008) reported that age has a positive correlation with willingness to collaborate. Increase in age of partners would result in deeper and stronger relationships arising from the mutuality and cordiality gained over time from the collaboration. The present study confirms that age has significant influence on areas of collaboration between librarians and faculty. The explanation for this finding could also be attributed to the stratified African culture where age defines leadership and followership. For instance, an older individual is more likely to propel a team of younger generations to collaborate with other teams. This explanation is consistent with Wok and Hashim's (2013) study in which they reported that younger employees have been found to have positive teamwork relationships. This divergence between this finding and other related studies could further be attributed to sample size and use of a different scale for data collection.

Further studies should be conducted in this regard to further establish the influence of age on collaboration. Such studies should focus on ascertaining if younger male and female librarians are more likely to foster collaboration, and a larger sample size should be used.

Finally, work experience was found to have no correlation with area of collaboration. This result is at variance with the findings by Elsous, Radwan, and Mohsen (2017), who found that work experience has significant influence on collaboration. This finding implies that academic librarians, irrespective of gender and work experience, are willing to collaborate with faculty. The reason for this could be because respondents demonstrated willingness to partner with faculty in core areas of the profession where they have received theoretical and practical exposure on becoming information specialists.

Implication of findings

In practice, stakeholders in academia need to commit more time and resources towards ensuring collaboration between librarians and faculty members. Similarly, heads of libraries in higher institutions of learning should develop and implement programmes that could promote partnerships, interaction and collaboration on a regular basis between librarians and faculty members, especially now that academic librarians have attained faculty status. For academic libraries, findings of this study also suggest the need for collaboration between academic librarians and faculty members, especially in curriculum planning, design and implementation so as to be more responsive to changes in teaching, research and learning. This research fits into the embedded librarianship model, a framework that could be leveraged upon to foster collaboration with faculty.

Conclusion and recommendation

In light of the findings of this study and the subsequent discussions, librarian-faculty collaboration is a good development for the promotion of academic excellence on a sustainable basis. Such collaboration will thrive best within a framework of team building where individual team members have defined roles. The models for such teamwork should be driven with every institution formulating its own policy to suit its peculiarities and needs. Models of this collaboration include appointment of librarians to Faculty Boards as well as designation of academic librarians as liaison librarians and embedded librarians. The study therefore recommends that various higher institutions should develop policies targeted towards an improved relationship between librarians and faculty. The study further recommends that librarians should be more engaged in evidence-based practices that will bring about collaboration with faculty. Librarians should give adequate attention to firming up their research, presentation, communication and ICT skills, as all of these skills are essential for collaboration. The study therefore suggests that stakeholders in higher education should imbibe the culture of expanding and strengthening collaboration between librarians and faculty. Considering that age has been found to have a significant influence on collaboration, except in the case of collaboration between librarians and faculty, it is suggested that further studies be undertaken to validate the influence of age on librarian-faculty collaboration by using a larger population.

References

Abu Bakar, B. A. (2009). Partnership between librarians and faculty at a Malaysian University Library: a focus group survey. http://digitalcommons.unl.edu/cgi/viewcont, Accessed date: 10 December 2016.

Anderson, L. M. (2016). *Embedding information literacy and the importance of faculty and librarian collaboration: A qualitative case study.* (Doctoral dissertation, University of Phoenix).

Auckland, M. (2012). Re-Skilling for research: An Investigation into the role and skills of subject and liaison librarians required to effectively support the evolving information needs of researchers. http://www.rluk.ac.uk/files/RLUK%20Re-skilling.pdf, Accessed date: 10 December 2016.

Bendriss, R., Saliba, R., & Birch, S. (2015). *Faculty and librarians' partnership: Designing a new framework to develop information fluent future doctors. The Journal of Academic Librarianship, 41*(6), 821–838.

Black, C., Crest, S., & Volland, M. (2001). Building a successful information literacy infrastructure on the foundation of librarian–faculty collaboration. *Research Strategies, 18*(3), 215–225.

Brasley, S. S. (2008). Effective librarian and discipline faculty collaboration models for integrating information literacy into the fabric of an academic institution. *New Directions for Teaching and Learning,* (114), 71–88.

Bruce, C. (2001). Faculty-librarian partnerships in Australian higher education: Critical dimensions. *Reference Services Review, 29*(2), 106–116.

Carnwell, R., & Carson, A. (2008). The concepts of partnership and collaboration. Effective practice in health, social care and criminal justice: A partnership approach. https://www.mheducation.co.uk/openup/chapters/9780335229, Accessed date: 4 January 2017.

Chaddha, K. (2009). *Improving librarian-faculty relationship in academic libraries.*

Christiansen, L., Stombler, M., & Thaxton, L. (2004). A report on librarian-faculty relations from a sociological perspective. *The Journal of Academic Librarianship, 30*(2), 116–121.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approach* (4th ed.). Thousand Oaks, CA: Sage.

Dale, P., Leharne, M., Knight, T., & Marshall, K. (2006). The subject specialist in higher education: Professional engagement. In P. Dale, M. Holland, & M. Matthews (Eds.). *Subject librarians: Engaging with the learning and teaching environment* (pp. 19–31). Aldershot UK: Ashgate Publishing Limited.

Doskatsch, I. (2003). Perceptions and perplexities of the faculty-librarian partnership: An Australian perspective. *Reference Services Review, 31*(2), 111–121.

Douglas, V. A., & Rabinowitz, C. E. (2016). Examining the relationship between faculty-librarian collaboration and first-year students' information literacy abilities. *College & Research Libraries, 77*(2), 144–163.

Dovidio, J. F., Brown, C. E., Heltman, K., Ellyson, S. L., & Keating, C. F. (1988). Power displays between women and men in discussions of gender-linked tasks: A multi-channel study. *Journal of Personality and Social Psychology, 55*(4), 580–587.

Ducas, A. M., & Michaud-Oystryk, N. (2003). Toward a new enterprise: Capitalizing on the faculty/librarian partnership. *College & Research Libraries, 64*(1), 55–74.

Eagly, A. H., & Johnson, B. T. (1990). Gender and leadership style: A meta-analysis. *Psychological Bulletin, 108*(2), 233–256.

Elsous, A., Radwan, M., & Mohsen, S. (2017). Nurses and physicians attitudes toward nurse-physician collaboration: A survey from Gaza Strip, Palestine. *Nursing Research*

and Practice, 1–7.

Gardner, C. C., & White-Farnham, J. (2013). She has a vocabulary I just don't have: Faculty culture and information literacy collaboration. *Collaborative Librarianship, 5*(4), 235–242.

Gellert, F. J., & Kuipers, B. S. (2008). Short-and long-term consequences of age in work teams: An empirical exploration of ageing teams. *Career Development International, 13*(2), 132–149.

Gilman, N. V., Sagàs, J., Camper, M., & Norton, A. P. (2017). A faculty–librarian collaboration success story: Implementing a teach-the-teacher library and information literacy instruction model in a first-year Agricultural Science course. *Library Trends, 65*(3), 339–358.

Gorman, M. (2003). Do librarians with tenure get more respect? *American Libraries, 34*(6), 70–72.

Henneman, E. A., Lee, J. L., & Cohen, J. I. (1995). Collaboration: A concept analysis. *Journal of Advanced Nursing, 21*, 103–109.

Hosburgh, N. D. (2011). Librarian faculty status: What does it mean in academia? *Library Philosophy and Practice, 572* https://digitalcommons.unl.edu/cgi/viewcont, Accessed date: 4 January 2017.

Hudson, B., Exworthy, M., & Peckham, S. (1998). The integration of localised and collaborative purchasing: A review of the literature and framework for analysis. *Nuffield Institute for Health, University of Leeds/Institute for Health Policy Studies.* University of Southampton.

Jaguszewski, J., & Williams, K. (2013). New roles for new times: Transforming liaison roles in research libraries. https://conservancy.umn.edu/bitstream/handle/11299/169867/T, Accessed date: 6 January 2018.

Kenedy, R., & Monty, V. (2011). Faculty-librarian collaboration and the development of critical skills through dynamic purposeful learning. *Libri, 61*(2), 116–124.

Kissel, F., Wininger, M. R., Weeden, S. R., Wittberg, P. A., Halverson, R. S., Lacy, M., & Huisman, R. K. (2016). *Bridging the gaps: Collaboration in a faculty and librarian community of practice on information literacy.* University Press of Colorado.

Kwadzo, G. (2014). Subject librarianship programme initiatives in academic library: The case of the University of Ghana Library System. *Journal of Library and Information Science, 4*(1) https://search.proquest.com/openview/1e829c9 (Accessed 5 February 2017).

Lapidus, M. (2009). Educating student pharmacists about herbal medicines: Faculty-librarian collaboration. *Health Information and Libraries Journal, 24*, 267–273.

Leeder, K. (2011). Collaborating with faculty Part I: A five-step program: *The Library with the Lead Pipe,* 2000–2009. http://www.inthelibrarywiththele, Accessed date: 11 January 2017.

Lindstrom, J., & Shonrock, D. D. (2006). Faculty-librarian collaboration to achieve integration of information literacy. *Reference & User Services Quarterly, 46*(1), 18–23.

Loesch, M. F. (2017). Librarian as professor: A dynamic new role model. *Education Libraries, 33*(1), 31–37.

Lomas, C., Burke, M., & Page, C. L. (2008). Collaboration tools. *Educase E - Learning Initiative,* 1–11 (Paper 2).

Losada, M., & Heaphy, E. (2004). The role of positivity and connectivity in the performance of business teams: A nonlinear dynamics model. *American Behavioral Scientist, 47*(6), 740–765.

Massis, B. E. (2012). Librarians and faculty collaboration–partners in student success. *New Library World, 113*(1/2), 90–93.

Matthies, B. (2004). The road to faculty-librarian collaboration. *Academic Exchange Quarterly, 8*(4), 135–141.

McCarthy, P. J. (2002). BI line• instruction collaboration: Imperative or imperilment? *Colorado Libraries, 28*(2), 34–35.

McCue, R. (2014). Does a blended learning, flipped classroom pedagogy help information literacy students in the long term adoption of research skills? https://www.llrx.com/2014/03/does-a-blended-learning-flipped-classroom-pedagog.

McKinley, R. K., Manku-Scott, T., Hastings, A. M., French, D. P., & Baker, R. (1997). Reliability and validity of a new measure of patient satisfaction with out of hours primary medical care in the United Kingdom: Development of a patient questionnaire. *BMJ, 314*(7075), 193–198.

McNee, D., & Radmer, E. (2017). Librarians and learning: The impact of collaboration. http://www.ncte.org/library/NCTEFiles/Resources/Journals/ELQ/0401.

Mitchell, W. B. (1989). *Faculty status for academic librarians: Compliance with standards, opinions of university administrators, and a comparison of tenure-success records of librarians and instructional faculty.* (Doctoral dissertation, Montana State University-Bozeman, College of Education, Health & Human Development).

Mozenter, F., Sanders, B. T., & Welch, J. M. (2000). Restructuring a liaison program in an academic library. *College & Research Libraries, 61*(5), 432–440.

Murray-Rust, C. (2005). Should librarians get tenure? Yes, it's crucial to their jobs. *The Chronicle of Higher Education, 52*(6), B10-B10.

Nalani Meulemans, Y., & Carr, A. (2013). Not at your service: Building genuine faculty-librarian partnerships. *Reference Services Review, 41*(1), 80–90.

Nilsen, C. (2012). Faculty perceptions of librarian-led information literacy instruction in postsecondary education. *World library and information congress: 78th IFLA general conference and assembly* (pp. 1–25). .

Onwudinjo, O. T. (2015). Law journal collections: accreditation issues and imperatives for law libraries. http://digitalcommons.unl.edu/libphilprac/1237, Accessed date: 5 February 2017.

Parker, J. O. (2003). Putting the pieces together: information literacy at the Open University. *Library Management, 24*(4/5), 223–228.

Pautz, M. C., & Gauder, H. (2017). Undergraduate research needs: Faculty-librarian collaboration to improve information literacy in policy papers. *Journal of Public Affairs Education, 23*(4), 1017–1030.

Phelps, S. F., & Campbell, N. (2012). Systematic reviews in theory and practice for library and information studies. *Library and Information Research, 36*(112), 6–15.

Pounder, J. S., & Coleman, M. (2002). Women–better leaders than men? In general and educational management it still "all depends". *Leadership & Organization Development Journal, 23*(3), 122–133.

Qobose, E. (2000). Subject librarians' relations with faculty at the University of Botswana: A review of liaison activities. http://southernlibrarianship.icaap.org/content, Accessed date: 5 February 2017.

Reed, M. J., Kinder, D., & Cecile, F. (2007). Collaboration between librarians and teaching faculty to teach information literacy at one Ontario University: Experiences and outcomes. *Journal of Information Literacy, 1*(3), 29–46.

Rodwell, J., & Fairbairn, L. (2008). Dangerous liaisons? Defining the faculty liaison librarian service model, its effectiveness and sustainability. *Library Management, 29*(1/2), 116–124.

Sacchanand, C. (2012). Building collaboration between library and information science educators and practitioners in Thailand: Transcending barriers, creating opportunities. http://conference.ifla.org/ifla78, Accessed date: 5 February 2017.

Shen, L. (2012). Improving the effectiveness of librarian-faculty collaboration on library collection development. *Collaborative Librarianship, 4*(1), 14–22.

Thull, J., & Anne Hansen, M. (2009). Academic library liaison programs in US libraries: Methods and benefits. *New Library World, 110*(11/12), 529–540.

Touchard, W., & Helms, C. M. (2003). Getting to know the Andrews University faculty: A library survey MLA Forum, 2, 3. http://www.mlaforum.org/, Accessed date: 5 February 2017.

Tripathi, S. (2014). Exploring the shifting paradigms of librarian-client relationship. *Annals of Library and Information Studies, 61*, 49–55.

West-Pawl, V. (2012). The embedded librarian: Is it enough. *Colorado Libraries, 36*(3), 1–6.

Winner, M. C. (1998). Librarians as partners in the classroom: An increasing imperative. *Reference Services Review, 26*(1), 25–29.

Wok, S., & Hashim, J. (2013). Communicating and sharing working relationships with older employees. *Journal of Communication Management, 17*(2), 100–121.

Woolley, A. W., Chabris, C. F., Pentland, A., Hashmi, N., & Malone, T. W. (2010). Evidence for a collective intelligence factor in the performance of human groups. *Science, 330*(6004), 686–688.

Wyss, P. A. (2010). Library school faculty member perceptions regarding faculty status for academic librarians. *College and Research Libraries,* 375–388.

Yousef, A. (2010). Faculty attitudes toward collaboration with librarians. http://digitalcommons.unl.edu/cgi/viewcontent.cg, Accessed date: 5 February 2017.