



Empowering Electronic Resources: Strengthening Librarian-Faculty Collaboration in Higher Education

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ABSTRACT

Background: This paper addresses librarian-faculty collaboration in higher education, with a specific focus on electronic resources. Key challenges identified include poor communication, time constraints, and lack of institutional support. The study underscores the significance of collaboration in developing and managing academic resources, especially given the increasing reliance on digital collections.

Purpose: The primary goal of the study is to explore ways to enhance teamwork between librarians and professors to improve the use and development of electronic resources. It aims to identify existing collaboration patterns, obstacles hindering effective partnerships, and the institutional support mechanisms that can foster better collaboration.

Methods: A quantitative approach was used, employing a cross-sectional survey methodology with 178 participants (89 male and 89 females) from various higher education institutions. The structured survey, utilizing a 5-point Likert scale, measured attitudes, perceptions, and the frequency of collaboration in areas such as curriculum alignment, resource selection, and digital resource management.

Results: The results reveal that both faculty and librarians recognize the importance of collaboration in resource selection and curriculum alignment. However, obstacles such as time constraints, lack of institutional support, and irregular communication hinder effective collaboration. Male participants showed greater interest in technical aspects, while females emphasized the importance of organized communication and digital resource management.

Conclusions: The study concludes that improving librarian-faculty collaboration in electronic resource integration requires regular communication, enhanced institutional support, and proactive engagement in resource development. Targeted strategies are needed to strengthen partnerships, improve academic resources, and ultimately enhance academic program outcomes.



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1. Introduction

Among the rapid sea changes in higher education, building and managing academic resources, particularly electronic ones, has become increasingly complex and critical. As digital technologies continue to reshape how information is accessed, shared, and used, the contribution that academics and librarians have made to the development of library collections for the library has become correspondingly and increasingly interdependent (Lowe *et al.*, 2020). By tradition, librarianship has stood as a sort of 'gatekeeper' in the logistics of information: curating for, organizing, and managing such collections that meet the diverse needs of both students and faculty alike. However, with today's increasing use of electronic resources and the dynamic changes within the demands of academic programs, the librarians' collaboration

with faculty members is now more crucial than ever. Faculty members provide subject expertise and close engagement with students, enabling them to bring most valuable insights into what kinds of resources are relevant for teaching and research (Echterling, 2019). The librarian would then contribute to this effort by providing technical skills and knowledge of information management that guarantee the selected resources are accessible, well-organized, and in tune with the bigger goals of the institution. Despite the evident advantages of collaboration, serious barriers to developing robust continuing partnerships between these two groups have often surfaced in higher education institutions.

The 21st century saw an explosion in knowledge and information brought on by the proliferation of ICT. Several forms that this explosion of knowledge and information takes includes the generation of data and generation of

information: big data or information generates data through many sources, including tweets, emails, and Facebook and WhatsApp messaging emanating from connected devices across the globe. While there has been an obvious increase in the number of scholarly journals over the years, no one has been able to pin down an exact figure for any one country (Bi, 2018; Walters, 2022). The availability and usage of electronic materials have increased for the last couple of decades thereby transforming and changing libraries and their operations (Okogwu & Ozioko, 2018). Therefore, the development of electronic resources in libraries belongs to the current environment of coping with users' needs in their changed aspects and attracts due attention. The updating of almost every electronic resource in a very short period makes the information outdated, so collection development is a must. Advantages of e-resource comprises hardly occupying physical space, having huge information capacity, enjoying time-space independence, sharing powerfully and having great potential of collection development. Due to the rapid advancement in technology and scientific findings, library clients anticipate current, accurate, reliable electronic resources (Dowdy *et al.*, 2014). Books, journals, databases, and multimedia are all forms of electronic resources that libraries should invest in so they may meet the information demands of their users (Choc & Špála, 1997). The development process of collecting electronic resources is complicated because of licensing restrictions, vendor relationships, and price restrictions. Libraries have various sources of funding, and collection development budgets are mostly insufficient. Therefore, the libraries should focus on acquiring the electronic resources relevant to the users. Libraries should also appeal to the sophisticated consumers who seek digital information at any time. Librarians should learn what the consumers want and look for innovative ways to enhance user experience. In regard to the mentioned factors above, electronic resource collection development is complicated because it requires cooperation, evaluation, analysis of the collections, and feedback from the users. Cooperation includes a joint effort between different stakeholders to offer the users the relevant electronic resources. University faculty is key stakeholders with whom libraries can collaborate in developing electronic resource collections (Nagasawa, 2019). Over a long era, academic librarians have collaborated with the faculty in library resource collections. University faculty select materials, assess the collections, and do weeding or deselection of library materials for teaching, learning, and research, including the evaluation of library resources and trial online databases. The collaboration of librarians and faculty is purely crucial to balance library collection development, instruction, and research literacy. According to 2022, library collection development requires the

involvement of faculty because they are best aware of the needs of their students and programs (Mishra *et al.*, 2021). These authors recommend that library staff make deposits to originate stronger collections for students. At each higher education library, a selection of materials is done by teaching faculty. For a long time, teaching faculty have been considered to possess the deepest knowledge of any subject matter and to be the most effective, productive, and economically efficient at the selection process related to library materials (Crawley-Low, 2002).

Barriers such as time constraints, lack of institutional support, and insufficient communication often hinder effective collaboration between librarians and faculty members. In many cases, faculty members may not be fully aware of the critical role that librarians play in managing and maintaining electronic resources, while librarians may struggle to engage faculty in the resource selection process. This disconnect can lead to a misalignment between the resources available in the library and the actual needs of academic programs, resulting in underutilized or irrelevant collections (Browning, 2015). The importance of bridging this divide cannot be overstated, especially as electronic resources continue to dominate the academic landscape. Ensuring that libraries provide resources that are both relevant and accessible to students and faculty is key to the success of any higher education institution. This study seeks to explore the current state of collaboration between librarians and faculty members, identify the challenges that hinder effective partnership, and propose strategies for fostering stronger, more productive relationships. By enhancing collaboration, institutions can ensure that their library collections better support academic success and meet the evolving needs of their programs.

2. Purpose of the Study

The purpose of this study is to explore and bridge the existing divide in collaboration between librarians and faculty members within higher education institutions, with a specific focus on collection development, especially for electronic resources. As institutions increasingly rely on digital resources, the roles of librarians and faculty in selecting, managing, and developing these resources become more crucial. However, challenges such as time constraints, lack of institutional support, and insufficient communication often hinder effective collaboration. This study seeks to address these challenges by examining the perceptions, attitudes, and frequency of collaboration between librarians and faculty members. By identifying the gaps and barriers in collaboration, the study aims to propose actionable strategies to enhance cooperation between these two vital groups, ultimately improving resource relevance and the quality of educational materials.

3. Statement of Problem

Despite the crucial role of both librarians and faculty members in the academic ecosystem, collaboration between the two in the area of collection development is often lacking or insufficient. This lack of collaboration can lead to a disconnect between the resources that libraries provide and the actual needs of academic programs. Faculty members, who are directly involved in teaching and research, possess critical insights into the resources required for their students and disciplines, on the other hand, librarians are the technical experts in managing these resources. The problem lies in the infrequency and inconsistency of their collaboration, which results in misaligned or underutilized library collections, particularly in the digital realm. Therefore, this study seeks to identify the barriers to effective collaboration and propose solutions to foster stronger partnerships between librarians and faculty.

4. Research Question

The central research question guiding this study is: How can collaboration between librarians and faculty members in higher education institutions be improved to enhance the development and management of electronic resources? The study seeks to investigate the existing patterns of communication, the roles played by each group in resource selection, and the institutional factors that either support or hinder collaboration. Additionally, it will explore how frequently librarians and faculty members engage in discussions about collection development and whether current collaboration practices adequately meet the needs of academic programs.

5. Objectives

The objectives of this study are as follows:

- To assess the current state of collaboration between librarians and faculty members in higher education institutions, particularly regarding collection development and electronic resources.
- To identify the key challenges and barriers that hinder effective librarian-faculty collaboration.
- To explore the roles and responsibilities of both librarians and faculty members in the resource selection and collection development process.
- To determine the impact of institutional support, communication platforms, and time availability on the frequency and effectiveness of collaboration.
- To propose strategies and recommendations to enhance the collaboration between librarians and faculty members, ultimately improving the quality and relevance of the resources provided by libraries.

6. Collection Development Role of Faculty and Librarians'

Collection development is so central to the information life cycle, with six major steps in the process: needs assessment, policy formulation, selection, acquisition, collection evaluation within various formats, and deselection (Lowe, 2019). In order to effectively meet the diverse informational and instructional needs of library users, the system will ensure the acquisition, upkeep, and upgrading of library resources. This process entails locating relevant resources and choosing them according to information requirements, quality, accessibility, affordability, and consumption. Faculty and librarian collaboration is becoming increasingly necessary, especially with the accessibility of electronic resources, while collection establishment has always been critical for providing relevant materials to support university courses (Appleton *et al.*, 2016; Echterling, 2019). Books, periodicals, databases, CD-ROMs, and computer networks are all examples of electronic resources. Faculty-librarian collaboration is very crucial in developing university library collections. Library professionals have to collaborate with the stakeholder to avoid delays in providing timely services. E-book purchases should be polled based on demand from educators and students (Lukes *et al.*, 2016).

7. Faculty-Librarian Collaboration in Developing Collections

The literature study found various related studies relating to the collaborative effort of faculty and librarian in the creation of library material collection. University librarians require faculty assistance to create collections that would result in meeting the needs for research, instructions, and discipline that is growing (Marshall, 2014). A university library designates subject librarians for each faculty or department who then work in coordination with the faculty library liaison on efforts for collection growth. Department heads and faculty deans are supposed to keep librarians well-informed about curricula, programming needs, and changing academic trajectories affecting library collections and services. Librarians and professors have to collaborate with each other because educators are the superior, speedier, and less costly selectors of library materials. The topic selectors create deliberate addition of titles as they are familiarized with the existing collections. The librarian found the meetings of the faculty board and the activities of the library committee to be the best for collaboration between librarians and professors in terms of collection production. As the librarians get better acquainted with the academics, they will also increase their knowledge regarding the academics' publications and their achievements in academia. Perhaps librarians' acquaintance with the roster of

faculty might assist them in developing collections which are truly representative of the academic work of those individuals. In their study, Mushtaq & Tausif (2020) explored engineering college library collection management at Aligarh (Muzamil Mushtaq & Ariba Tausif, 2020). The investigation revealed that there existed, within all six engineering institutes, library committees to propagate e-resources and advise librarians on subscription problems. This supports the views of Khan & Bhatti (2016) when they opined that teachers should be the ones to select the collections since they know best their subjects and students' needs. Collection development starts with the faculty for book selection, while the library department is involved in the formulation and coordination of budgets, university management is responsible for financial allocations, dealings with book publishers and suppliers are handled by the university, while the actual procurement is handled by the procurement department. There is no provision for input by faculty stakeholders in the selection of library resources. Furthermore, the policy fails to state the selection criteria. Policies need to be revised by librarians in a manner that allows for accommodation of faculty in building of collections and their selection of books (Adesina, 2019).

8. Challenges in Collection Development Partnerships

Even in the difficult setting of partnership projects, faculty librarians' participation has produced outstanding outcomes in the growth of collections. Collection development, assessment, and the elimination of unnecessary or outdated materials are three factors that impact the interaction between libraries and faculty. They recommended that the library and the academic community work together more closely. Faculty members' lacks of knowledge about which publishers provide electronic resources, as well as a dearth of catalogs and vendor title lists, are just a few of the reasons the library can't increase its collection size. There are a lot of obstacles to effective electronic resource searches, including insufficient training and expertise, slow intranet or internet connections, a lack of cooperation and assistance between librarians and instructors, and a lack of time to devote to online research. Again, there is another set of issues which includes slow internet connectivity and limited time spent in searching. Other issues included a lack of a collection development policy, a lack of adequate funding to match the rapidly increasing e-resource pricing in many disciplines, and no engagement by faculty in selecting the e-resources. The faculty was also reluctant to select library resources, particularly electronic, which impeded communication with the library staff. Rice & Cummings (2021) also established that a lot of difficulties and limitations characterize the building of collections found in private institutions,

including very lengthy selection, slow access to the internet, and print tools of selection, which impede the material selection, and delays in order delivery (Rice & Cummings, 2021). Other complications include the prohibition of most private universities regarding the prepaying for orders placed on the internet; a lack of accommodation for consultation with instructional staff in selecting materials; and in general, a shortage of staff to develop the collection. Kamau & Elegwa (2022) recorded that there was "conflict among instructional staff over what materials to purchase". The reason could be the complete lack of a faculty selection policy. This confirms statement of Khan and Bhatti (2016) statement that the faculty members' slow response greatly hinders effective material procurement and supply when an acquisition is to be undertaken. It is true that the fundamental role of selecting library items, which rests with the faculty members, is equally highly problematic because their sole commitment to pedagogical and administrative issues diminishes the perception of collection development as their core duty. As such, they require a relatively long time to effect selection decisions. Some of the problems which the management libraries in India face include defective budgets allocated for purchasing electronic resources (Simpson *et al.*, 2005). Results revealed that restricted budgets, an absence of standards and policies, inadequate user and collection evaluations, unsatisfactory collaboration between faculty and library and information science professionals, rapid proliferation of e-resources, lack of ICT implementation, and passive role of library associations act as major hindrances towards collection development in university libraries (Some, 2021). The collection management issues identified to be faced by university libraries in Pakistan included hybrid collections, user services, staff training, collection assessment and resource sharing and preservation. All contributors to collection development participate in the identification of bibliographies and the scrutiny of sources for the library collections. Selection tools can summarize the content from publishers and media producers. The library therefore needs to develop policies and methods for the selection of electronic resources. Selection of electronic resources should be based on copyright, intellectual nature of source materials, current and future users, actual and expected usage, format and costs (Raghavaiah & Surendra Babu, 2017). The advantages do indicate that if libraries are to continually assess e-resource selection criteria they must determine how to include internet-based content into the collection development policy.

9. Research Methodology

This study utilizes a structured, survey-based approach to examine librarian-faculty collaboration in higher

education institutions, particularly focusing on electronic resource development. A descriptive research design was used, incorporating both quantitative and qualitative data collection methods. The survey, focused on key collaboration areas like curriculum alignment, resource selection, digital resource management, and communication, was distributed to over 400 individuals. The sample size exceeded the minimum requirement of 160, calculated using G*Power with an effect size of 0.15, an alpha level of 0.05, and a power of 0.95 for 8 predictors. The required sample size was 160, but we ultimately included 178 participants (89 males and 89 females) through stratified random sampling. Respondents rated statements on a 5-point Likert scale, with the option to provide qualitative insights. Data was analyzed using descriptive statistics to identify trends, while cross-tabulation helped compare responses based on gender, designation, and experience. The study acknowledges potential biases due to self-reported data and limited geographic scope. Though the sample size is adequate for descriptive purposes, broader studies are recommended for more generalizable conclusions. Overall, the methodology offers a comprehensive understanding of collaboration dynamics, highlighting both quantitative trends and qualitative insights into the challenges and effectiveness of librarian-faculty partnerships.

10. Results and Discussion

Table 1 shows relatively balanced gender distribution across age, designation, education level, and experience observed, although a few trends do seem to appear. For example, males hold higher academic positions of Associate Professors at 23.59% and Professors at 10.11%, while females were dominant in assistant positions, with 21.34% being Assistant Librarians. Both sexes are well educated, with quite a number having doctorates, 28.08% males and 25.84% females, which showcase their qualification status. From the point of view of experience, the male population contributes more to the category >20 years with 25.84% than do females at 23.59%, while females have 22.47% in the <5 years group. Both male and female samples are spread over most of the age brackets, but a huge chunk falls within the 46-55 age bracket. It generally reflects early-, middle-, and late-career individuals, with males a little more senior and longer tenure ship, females in more frequent assistant roles, and earlier career tenure ship. These data describe the distribution of gender, age, educational level, designation, and experience of the participants in this study. While there is a relatively equal distribution across many of the categories, trends in areas such as seniority of academic positioning and years of experience tended to be male-dominated, while females seemed to dominate assistant

positions or those beginning their career. In any case, the distribution reveals that both sexes are well-represented over a range of professional and educational levels and thus provide a wide perspective on librarian-faculty collaboration in collection development.

Table 1: Demographic Information

Demographic Information				
Age	Male N	%	Female N	%
18-25	19	21.34	21	23.59
26-35	19	21.34	22	24.71
36-45	24	26.96	20	22.47
46-55	27	33.33	26	29.21
Total	89		89	
Demographic Information				
Designation	Male N	%	Female N	%
Librarian	24	26.96	20	22.47
Assistant Librarians	14	15.73	19	21.34
Assistant Professor	21	23.59	18	20.22
Associate Professor	21	23.59	16	17.97
Professor	9	10.11	16	17.97
Total	89		89	
Demographic Information				
Education Level	Male N	%	Female N	%
Diploma	23	25.84	20	22.47
Bachelor's	22	24.71	26	29.21
Master's	19	21.34	20	22.47
Doctorate	25	28.08	23	25.84
Total	89		89	
Demographic Information				
Experience	Male N	%	Female N	%
< 5 years	13	14.6	20	22.47
6-10 years	22	24.71	14	15.73
11-15 years	13	14.6	16	17.97
16-20 years	18	20.22	18	20.22
> 20 years	23	25.84	21	23.59
Total	89		89	

Table 2 further illustrates that there is agreement across the response categories on the importance of collaboration for both male and female respondents: Many males, 41.57% SA and 37.08% A expressed agreement that curriculum alignment is important in order for teamwork to take place. More critical teamwork resource selection was reportedly agreed upon by 52.81% of males and 43.82% of females

who strongly agree in support of collaboration. Agreement that research support is vital to student success was also universal, although men were slightly negative at -2% N. Women were more divided in their levels of agreement, although the majority strongly agreed/agreed. Joint development of digital resources was also important, with

52.81% of males and 47.19% of females strongly agreeing, although a very small number of males responded negatively. It follows from the results that academic achievement values the collaboration of librarians and faculty in curriculum alignment, selection of resources, and development of digital resources.

Table 2: Importance of Areas of Collaboration

Statement	Gender	SA	%SA	A	%A	N	%N	D	%D	SD	%SD
Importance of Areas of Collaboration											
Librarians and faculty members find curriculum alignment important for collaboration.	Male	37	41.57	33	37.07	15	16.85	2	2.24	2	2.24
	Female	35	39.32	35	39.32	15	16.85	4	4.49	0	0
Resource selection is a key area for collaboration between librarians and faculty members.	Male	47	52.80	39	43.82	1	1.12	2	2.24	0	0
	Female	39	43.82	43	48.31	5	5.61	2	2.24	0	0
Collaborating on research support is critical to the academic success of students.	Male	45	50.56	44	49.43	2	2.24	1	1.12	1	1.12
	Female	37	41.57	34	38.20	17	19.10	1	1.12	0	0
Joint involvement in digital resource development is essential for library collection quality.	Male	47	52.80	44	49.43	3	3.37	1	1.12	0	0
	Female	42	47.19	38	42.69	8	8.98	1	1.12	0	0

From Table 3, male and female participants liked different systems for communicating between librarians and faculties. Though both males (49.44%) and females (43.82%) strongly believed that Email and shared database are good tools for cooperation, smaller minorities, especially males (30.34% A and 14.61% N), were indecisive-neutral. A majority of the males' opinions falls into 49.44% SA and 38.20% A, whereas in females, the distribution is more scattered: 35.96% chose SA and 34.83% chose A, which means some females see less need for them. Regular virtual meetings across Zoom and Microsoft Teams are viewed favorably, especially by males

47.19% SA, whereas for females, the strong agreement rate is somewhat lower, 40.45% SA, with a higher share of 23.60% being neutral. Collaboration software, such as Trello or Slack prototype, does receive strong agreement among the male respondents at 49.44% SA, though females at 40.45% SA remain more indifferent, as 26.97% show a neutral perception. The investigation has shown that both genders believe that digital platforms, face-to-face meetings, and collaborative software improve both communication and collaboration, with some variation in agreement, mainly on the aspect of in-person compared to digital platforms.

Table 3: Platform for Collaboration

Statement	Gender	SA	%SA	A	%A	N	%N	D	%D	SD	%SD
Platform for Collaboration											
Online platforms (email, shared databases) are effective for collaboration between librarians and faculty.	Male	44	49.43	27	30.33	13	14.60	1	1.12	4	4.49
	Female	39	43.82	31	34.83	16	17.97	1	1.12	2	2.24
Face-to-face meetings are necessary for productive librarian-faculty collaboration.	Male	44	49.43	34	38.20	7	7.86	1	1.12	3	3.37
	Female	32	35.95	31	34.83	21	23.59	4	4.49	1	1.12
Regular online meetings (e.g., via Zoom or Microsoft Teams) are beneficial for maintaining collaboration.	Male	42	47.19	28	31.46	18	20.22	1	1.12	0	0
	Female	36	40.44	31	34.83	21	23.59	1	1.12	0	0
Collaborative software (e.g., Trello, Slack) enhances communication and efficiency in collection development.	Male	44	49.43	28	31.46	16	17.97	1	1.12	0	0
	Female	36	40.44	27	30.33	24	26.96	1	1.12	1	1.12

Table 4 shows that male and female respondents agree on one thing: the librarians are capable of cooperating with the teachers. However, their responses differ in the specialist topic expertise of a librarian, where 35.96% for males and 46.07% for females strongly believe that they are well-equipped and quite a large number of them agree. A good number of the respondents, or 22.47% for males and 14.61% for females, are uncertain—meaning some skeptics doubt librarians about their subject expertise. Both males and females feel fairly confident about the management of digital resources: 42.70% and 46.07%, accordingly, strongly agree. However, 24.72% of males and 20.22% of females

fall into the neutral category, therefore making a conclusion that librarians could benefit from even more development in this area. Regarding communication skills, females show greater confidence: 37.08% give a strong agree against the males who are more indifferent, with 35.96%, and fewer, 34.83%, strong. Finally, 38.20% of male and 39.33% female participants believe that librarians need to be better prepared to develop the collaborative role. The study showed that librarians do not doubt their skills but also demonstrated that professional development, particularly in aspects of communication and digital management, could be better at enhancing faculty collaboration.

Table 4: Librarian Skills for Effective Collaboration

Statement	Gender	SA	%SA	A	%A	N	%N	D	%D	SD	%SD
Librarian Skills for Effective Collaboration											
Librarians have the subject expertise necessary to collaborate effectively with faculty.	Male	32	35.95	32	35.95	20	22.47	2	2.24	3	3.37
	Female	41	46.06	30	33.70	13	14.60	1	1.12	4	4.49
Librarians possess the digital resource management skills required for successful collaboration.	Male	38	42.69	26	29.21	22	24.71	1	1.123	2	2.24
	Female	41	46.06	25	28.08	18	20.22	3	3.37	2	2.24
Librarians' communication skills are sufficient to maintain productive collaboration with faculty.	Male	31	34.83	25	28.08	32	35.95	1	1.12	0	0
	Female	33	37.07	25	28.08	30	33.70	1	1.12	0	0
Librarians need additional training to optimize their collaboration with faculty members.	Male	32	35.95	34	38.20	20	22.47	1	1.12	2	2.24
	Female	35	39.32	30	33.70	23	25.84	1	1.12	0	0

Table 5 shows that, on the whole, faculty members are familiar with librarians' contributions to collection development. It is in need of improvement, though. 44.94% of males and 41.57% females strongly agree about awareness among faculty members on subject librarians' role in collection development, while 37.08% and 30.34% agree. Still, 14.61% males and 24.72% females are neutral, which means that many may not be aware of the roles that librarians play. Females agree less than males that subject librarians should help the faculty find resources. More

females, 23.60%, are undecided and this indicates that faculty-librarians engagement should be advanced. The strong agreement is higher for females, 49.44%, compared to males, 39.33% on what entails the responsibility of the collection development librarians, but for both genders, the level of agreement appears to be average, 34.83% for males and 35.96%. Even with these positive results, a few maintain neutrality or disagree; above all, females, which shows that awareness should be raised regarding librarians' roles in developing resources to foster even better collaboration.

Table 5: Faculty Awareness of Librarians' Roles

Statement	Gender	SA	%SA	A	%A	N	%N	D	%D	SD	%SD
Faculty Awareness of Librarians' Roles											
Faculty members are aware of the role of subject librarians in collection development.	Male	40	44.94	33	37.07	13	14.60	2	2.24	1	1.12
	Female	37	41.57	27	30.33	22	24.7	1	1.12	2	2.24
Faculty members frequently seek the assistance of subject librarians when selecting resources.	Male	43	48.31	31	34.83	13	14.60	1	1.12	1	1.12
	Female	33	37.07	31	34.83	21	23.59	2	2.24	2	2.24

Faculty members understand the responsibilities of collection development librarians.	Male	35	39.32	31	34.83	20	22.47	1	1.12	2	2.24
	Female	44	49.43	32	35.95	8	8.98	2	2.24	3	3.37

Table 6 shows that in collection building, there is unanimity between teachers and librarians on collaboration issues. On the activity of faculty members in selecting items for the library, faculties of both genders strongly agree at 47.19%, while about one-third of men (33.71%) and females (35.96%) agree in this regard. Very few male and female respondents reported neutral perceptions of faculty engagement in this role: 17.98%, and 12.36%, respectively. Females agree that the technical aspects of collection development should be left to librarians (39.33% SA, 35.96% A), but males show a neutral attitude for this

statement, which indicates a desire for more involvement by librarians. The statement that faculty participation is not necessary to ensure the needs of the academic programs are met shows that 40.45% of males and 43.82% of females strongly agree, against 19.10% males and 17.98% females whose response is neutral, showing that while most acknowledge its importance, faculty participation may vary. The evidence reflected that the responsibility for collection development is shared by academics and librarians, with the latter acting as technical leads, while faculties select resources, but not always.

Table 6: Roles in Collection Development

Statement	Gender	SA	%SA	A	%A	N	%N	D	%D	SD	%SD
Roles in Collection Development											
Faculty members play an active role in selecting materials for the library collection.	Male	42	47.19	30	33.70	16	17.97	1	1.12	0	0
	Female	42	47.19	32	35.95	11	12.35	2	2.24	2	2.24
Librarians take the lead in managing the technical aspects of collection development.	Male	33	37.07	28	31.46	27	30.33	1	1.12	0	0
	Female	35	39.32	32	35.95	19	21.34	1	1.12	2	2.24
Faculty input is essential for ensuring that library resources meet the needs of academic programs.	Male	36	40.44	33	37.07	17	19.10	1	1.12	2	2.24
	Female	39	43.82	30	33.70	16	17.97	3	3.37	1	1.12

Table 7 shows the broad consensus that faculty collaboration in collection development is key to library relevance and effectiveness. In terms of resources relevance, 33.71% males and 42.70% females had strongly agreed that faculty participation in selection is important. However, a big slice of both genders remain undecided. This could mean that even though most participants value inputs from faculty, they may think that such inputs are not utilized to their fullest. Correspondingly, 33.71% of males and 40.45% females strongly agree that the faculty input is essential in the electronic resources

of the library, while 35.96% and 19.10% males and females are indifferent respectively. The last statement calling for faculty input in the selection and development of resources was strongly agreed by 38.20% males, and 41.57% females. A small minority disagree, 4.49% of males or 1.12% of females, which would be indicative again that even though most want more faculty input, there may be a few satisfied. The majority agrees that faculty input is cohesive; neutrality, however, indicates that consistency or integration of faculty engagement must vary in certain disciplines.

Table 7: Importance of Faculty in Collection Development

Statement	Gender	SA	%SA	A	%A	N	%N	D	%D	SD	%SD
Importance of Faculty in Collection Development											
Faculty involvement in collection development is crucial for ensuring resource relevance.	Male	30	33.70	28	31.46	30	33.70	1	1.12	0	0
	Female	38	42.69	27	30.33	20	22.47	1	1.12	3	3.37
The success of the library's electronic resources depends on faculty input.	Male	30	33.70	26	29.21	32	35.95	1	1.12	0	0
	Female	36	40.44	34	38.20	17	19.10	1	1.12	1	1.12

Faculty members should be more actively involved in resource selection and development.	Male	34	38.20	33	37.07	17	19.10	4	4.49	1	1.12
	Female	37	41.57	32	35.95	18	20.22	1	1.12	1	1.12

Table 8 shows mixed but mainly positive results for the communication of librarian-faculty collection development. Males highly agree at 40.45% and agree at 35.96% that they regularly contact librarians about collection needs. 19.10% are neutral. Females show a similar pattern: 37.08% very in agreement and 30.34% in agreement, while 31.46% are neutral, which hints that the communication is not constant or frequent enough. Frequencies for the question of how often meetings are held to discuss new resource purchases showed that 41.57% of males and 37.08% of females showed

strong agreement, while 16.85% of males and 24.72% of females were neutral, indicating that such a meeting may not be held as frequently. Librarians actively pursuing faculty comments also saw high male agreement at 46.07% SA and female agreement at 47.19% SA. A minority of both sexes are neutral (15.73% of males and 17.98% of females) and few disagree which suggests that headquarters are proactive but colleges may solicit faculty views differently. The study tells about positive trends in communication, yet librarian-faculty contacts are required to be more frequent.

Table 8: Frequency of Communication

Statement	Gender	SA	%SA	A	%A	N	%N	D	%D	SD	%SD
Frequency of Communication											
Librarians and faculty members communicate frequently about collection development needs.	Male	36	40.44	32	35.95	17	19.10	1	1.12	3	3.37
	Female	33	37.07	27	30.33	28	31.46	1	1.12	0	0
Regular meetings are held between librarians and faculty to discuss new resource acquisitions.	Male	37	41.57	32	35.95	15	16.85	1	1.12	4	4.49
	Female	33	37.07	32	35.95	22	24.7	1	1.12	1	1.12
Librarians proactively seek input from faculty members regarding resource selection.	Male	41	46.06	31	34.83	14	15.73	2	2.24	1	1.12
	Female	42	47.19	27	30.33	16	17.97	2	2.24	2	2.24

Based on Table 9, collaboration problems between librarians and faculty are due to a lack of time and institutional support. A fair proportion of the male respondents agree that time constraints inhibit effective collaboration—40.45% (SA) and 37.08% (A)—though a fair minority are neutral—17.98% of males, 23.60% females—indicating that while time is a common problem, its impact does indeed vary across institutions. Many people believe that more can be done by institutions to help facilitate collaboration, with 40.45% of males strongly agreeing and 30.34% agreeing, and 41.57% of females strongly agreeing and 37.08% agreeing. Still, an acceptable 25.84% men and 20.22% women are neutral, representing

that others may not be as deterred by this challenge. The second major problem is related to the faculty being too busy to participate in collection development talks, where 39.33% males and 47.19% females strongly agree to it with only few disagreeing. Finally, with the central obstacle of a lack of communication platform understanding, 44.94% of male and 41.57% female subjects strongly believe this is a hindrance, while 23.60% and 17.98%, respectively, are neutral. This suggests increasing platform awareness could further enhance its usage for communication. The research has identified time, institutional support, and awareness of communication tools as significant barriers for improvement in collaboration between librarians and faculty.

Table 9: Challenges in Collaboration

Statement	Gender	SA	%SA	A	%A	N	%N	D	%D	SD	%SD
Challenges in Collaboration											
Time constraints prevent librarians and faculty members from collaborating effectively.	Male	36	40.44	33	37.07	16	17.97	2	2.24	2	2.24
	Female	33	37.07	31	34.83	21	23.59	2	2.24	2	2.24

There is a lack of institutional support for fostering librarian-faculty collaboration	Male	36	40.44	27	30.33	23	25.84	1	1.12	2	2.24
	Female	37	41.57	33	37.07	18	20.22	1	1.12	0	0
Faculty members are often too busy to participate in collection development discussions.	Male	35	39.32	34	38.20	17	19.10	2	2.24	1	1.12
	Female	42	47.19	29	32.58	14	15.73	1	1.12	3	3.37
Lack of awareness of available platforms for communication hinders collaboration.	Male	40	44.94	25	28.08	21	23.59	1	1.12	2	2.24
	Female	37	41.57	33	37.07	16	17.97	2	2.24	1	1.12

The results from Tables 2 to 9 reveal several key insights into librarian-faculty collaboration in higher education institutions. Both genders generally recognize the importance of collaboration in areas like curriculum alignment, resource selection, and digital resource development, with strong agreement from both males and females (Tables 2 and 3). However, challenges persist, with time constraints, lack of institutional support, and inconsistent communication emerging as significant barriers (Tables 8 and 9). Librarians are perceived to possess the necessary subject expertise and digital resource management skills; though some respondents believe additional training is needed to optimize collaboration (Table 4). Faculty awareness of librarians' roles in collection development is strong, though there is room for improvement in terms of proactive engagement from both sides (Table 5). In terms of roles, librarians lead the technical aspects of collection development, while faculty members contribute through resource selection, though the extent of their involvement varies (Tables 6 and 7). Communication between librarians and faculty is generally positive, though the frequency of regular meetings and proactive input-seeking from librarians could be enhanced (Table 8). Overall, the data suggests a need for stronger institutional support, more structured communication, and greater awareness of collaborative platforms to overcome the challenges identified.

11. Recommendations

Key recommendations can then be made based on findings to further strengthen the collaboration between librarians and faculty members. First, institutions may need to ensure better structural and regular communication. This might be through on-campus and virtual regular meetings where collection development needs are discussed between librarians and faculty members. Online forums and collaboration tools such as Trello or Slack should be actively promoted in order to enable easy interaction with the view to allow easy access to information shared from both sides. Further institutional support for collaboration is required. Time constraints were mentioned again and again as a hindrance to effective cooperation. Higher education

institutions can provide specific time for collaborative activities or alleviate workload burdens that limit faculty members and librarians from participating in such crucial discussions. Thirdly, the faculty members should participate well in the resource selection process. The librarians, in turn, should explicitly elicit input from the faculty and offer training or awareness sessions highlighting how important a role they play in collection development. It is therefore in these decisions that faculty bring essential insights into the types of resources that best match their courses and research, and their participation in collection development is essential to relevance and quality in library collections. Finally, librarians also need more professional development around digital resource management and targeted communications so that they can collaborate effectively with the faculty in support of mutual goals. This will help the librarians engage better with the faculty and make them invaluable participants in the resource development process by enhancing their skills in the mentioned arenas.

12. Conclusion

The critical need identified here is the better collaboration between librarians and faculty members in institutions of higher learning on matters such as the development and management of electronic resources. In fact, findings revealed several underlying barriers against both librarians and faculty members in effectively collaborating, such as lack of time and institutional support. Each values a different role, and hence there is some disconnection in communication and the selection of resources. With these challenges being addressed through regular communication, institutional support, and greater faculty engagement, higher education institutions can ensure that library collections will be increasingly relevant, accessible, and aligned with academic programs. Furthermore, the librarians' contribution to the resource development process will turn out to be more effective if professional development opportunities are provided to them. Finally, an increased collaboration between librarians and faculty will lead to an effective collection development in which libraries will continue serving their purposes for students and educators also in the digital future.

13. Limitations and Future Recommendations

The study recognizes many limitations, including possible biases from self-reported data and restricted geographic breadth of the studied institutions that did not allow wider contextual representation. The nature of the study is cross-sectional; hence, there is limited ability to monitor dynamic changes in collaboration over time. The sample size, though adequate for the assurance of descriptive analysis, may not generalize to larger or more diverse groups. Further research should expand its geographic and institutional scope, offer longitudinal approaches to test the temporal nature of collaborative behaviors, and add more extensive qualitative measures that will probe the more complex aspects of librarian-faculty collaboration. Addressing such limitations will help provide a fuller understanding of challenges and approaches involved in raising collaboration levels in the development and management of e-resources.

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Authorship Contribution

All authors contributed equally to the research design, data collection, analysis, and writing of this manuscript.

Ethical Approval

The study was conducted in accordance with ethical standards, and approval was obtained from the relevant institutional review board.

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Conflict of Interest

The authors declare no conflict of interest related to this study.

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