

# Factors Affecting the Use of Medical Library: A Case Study of the College of Medicine and Health Sciences, Bingham University Jos Campus

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## Abstract

*The academic library as an organised place holds a unique position on campus as it symbolically and physically represents the academic heart of an institution. It is expected to provide a serene environment for learning and research. Its architectural expression and sitting continue to reflect the unique legacy and tradition of an institution of which it is a part. This study assessed library users on Factors affecting the Use of a Medical Library: A case study of the College of Medicine and Health Sciences, Bingham University, Jos Campus. Simple random sampling was used in the study; fifty (50) library users were selected for the study. A questionnaire was used as the main instrument for data collection. Data collected were analyzed using descriptive statistics. The research findings revealed that the location of the College Library is one of the causes of low library patronage as the library is a sandwich between lecture halls, hostel accommodations, and staff quarters with its consequent activities. Distraction and lack of conveniences in the library are all caused by the library location, amongst many factors. The study concludes that critical actions be taken in addressing identified problems to improve more considerable patronage, improve research output, and better library services. The study recommended that the College Library should be relocated to a convenient alternative building which should be easily accessible or a new library complex be built to accommodate staff offices and conveniences for staff and users. The study further recommended better funding and proper repairs of building structures to safeguard lives and property.*

**Keywords:** Factors, Use, Medical Library, Bingham University, Jos

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## Introduction

The need for human beings to record, preserve, and transmit their thoughts, visions, and culture to other generations brought about the idea of writing. The need to organize and preserve these writings for future use could have been the harbinger of libraries.

Libraries have existed for an extended period, as far back as 6000 years ago. The beginnings can be traced to the Sumerians (West Pakistan) who developed the clay tablets in which cuneiform signs and characters were used to record the activities of the government, temple, and business. Cuneiform writing was a form of

a wedge-shaped pen that was inscribed on clay. It was used for writing symbols on clays. This made an impression on wet clay tablets, which were later dried and hardened. These tablets were then preserved and arranged. This can be said to have influenced the idea of libraries. Libraries were later found in Egypt, where papyrus was used as a medium of recorded information instead of tablets and clay.

There was also evidence of ancient libraries in Greece. But the best known of these was Aristotle's Library and the Alexandrian Library. The Greeks were famous scholars. Herodotus, and Aristotle. Thus, there was recorded information in many disciplines, especially in philosophy, politics, ethics, poetry, medicine, astronomy, mathematics, science, and the like. In the medieval period, the parchment codex replaced papyrus as the principal medium of recording knowledge in monasteries and cathedrals by monks and Bishop, who contributed to the growth of libraries in Europe. The parchment codex resembles the book of today as it was a bound manuscript folded into several parts and sewn together. Earlier into the modern era, the Chinese invented paper. Hence, books were produced in large quantities and were made affordable. Books replaced manuscripts in Europe, and for the first time, books were arranged on the shelves at the Vatican Library in Rome. During the medieval period, some leading Universities sprang up in Europe. Some of these Universities, according to Edoaka (2000), were established in Bologna and Salerno in Italy, Paris in France, and Oxford in England. Gradually libraries formed prominent parts of these Universities where the classics and the contemporary writings of the Western world were preserved.

Freeman (2005) emphasized that the academic library as a place holds a unique position on campus as it symbolically and physically represents the academic heart of an institution. He maintained that its architectural expression and sitting continue to reflect the unique legacy and traditions of institutions of which it is a part. An excellent academic library building as a place is expected to provide flexible learning space and traditional reading rooms that encourage learning and scholarship. It is expected to provide a serene environment for learning and research. The library is still indispensable as a place or base for teaching, learning, and research in the digital age. The users made it possible by adopting the concept of information commons, which insists on interactivity and collaboration in the library environment. The paradigm shift in information resources from print to electronic and services from manual to electronics call for critical examination of the concepts, principles, and features of the library as space and place. This will in no doubt position the present library and library of the future in the same line with the trend.

Therefore, academic librarians, architects, and library administrators have to collaborate to ensure that libraries are built in locations where convenient learning and research environment are provided. It is imperative to situate the library in a quiet, serene, and productive environment.

## **Problem Statement**

Space is a fundamental concept in designing and planning an academic library as a place. Three essential elements are considered in designing and planning an academic library. The elements are function, usability, and attractiveness. A library building that works is a product of its designers or clients that understands and applies the behavioral component of the planning process, where users and staff comfort is considered, Cohen and Cohen (1979). The site and design of a library building should find the efficiency of space and place in encouraging usability and productivity.

The Medical Library of the College of Medicine and Health Sciences, Bingham University, Jos Campus, is located on the last floor of a two-story building and situated in a hall initially designed to be a lecture hall. The library is located between hostel accommodations, lecture halls, and staff quarters without space for expansion or future development. Hence, the elements considered when designing and planning an academic library cannot be fully utilized. Activities surrounding the college library negatively affect the operation and effective use of the library by staff and students. It is in light of these problems that this research is designed to proffer solutions for effective and efficient use of the library.

## **Objectives of the Study**

The objectives of the study are to:

1. Identify the effects of the library location on users
2. Identify the problems militating against the effective operation of the College Library.
3. Proffer lasting solutions to the problems identified for smooth library output.

## **Research Questions**

For this study, the following research questions were formulated;

- i. What are the effects of the library location on its users?
- ii. What are the problems associated with the location of the college library?
- iii. What are the possible solutions to the problems associated with the library location?

## **Literature Review**

A quiet place where lighting is adequate makes it easier for people to concentrate in the library than in a perpetually noisy and dimly lit area. Cohen and Cohen (1979) noted that the interior design aspect such as furniture and equipment layouts, people and material traffic patterns, workflow, lighting, acoustics, and some libraries are most times looked up as “sterile” or simply “uncomfortable.” Some problems that enunciated these remarks include inadequate power supply, noisy environment, proximity to library locations, water leakages, temperature extremes, etc. even colour affects users’ and staff’s work in the library.

Prytherch (1998) listed three types of environment that have impacted on the library activities.

- I. The world outside which is more or less the macro-environment or the external environment.
- II. Professional environment: -This implies what is in practice outside the immediate library environment by peers.
- III. Internal environment, where local practice impacts on the efficiency and competence of the organisation.

All librarians are generally concerned with their roles while a new library building is planned. Far too many people, including architects, think they know what is required in a library building, and this is simplified to mean a structure capable of providing accommodation for the collections, staff, and readers. There is more beyond this assumption. There is more to a library building than architectural style, space allocation, and harmony with the rest of the building.

Whose responsibility is it to determine the needs and spaces of a library building? Is it the librarian or the architect? This question is raised because librarians are deemed not well informed about buildings in general and library buildings in particular; there are problems and possibilities or the procedures to follow in identifying the needs of users and transforming them into plans. Secondly, that he is not trained to be able to articulate such demands, it is then assumed that it was better for him to make use of a library building consultant, who, based on past experiences, can produce more significant input to the design process.

It will be better for the librarian to deal directly with the architect than through a third party who may not appreciate the librarian's aims and objectives in the building. However, we may look at the different roles of the librarian and the architect; both need to produce a functional library building and so must work together.

Every new library should be regarded as an experiment, and more care devoted to the planning. Such planning ought to produce great success in terms of library function as well as its architecture. Hence, the need for a design team made up of the librarian, the architect, the engineers, and the internal designer. According to the Association of College and Research Libraries' (ACRL) standards for college libraries 2000 Edition, "the library facility should be well planned; provide secure and adequate space, and conducive to study and research with suitable environmental conditions for its services, personnel, resources, and collections.

ACRL offers the following factors for consideration when developing the academic library programme:

- ✓ The library should provide well-planned, secure, and adequate space for users.
- ✓ The building mechanical systems should be appropriately designed and maintained to control the temperature and humidity of recommended levels.
- ✓ Perceptions of users regarding the provisions of conducive study spaces, including a sufficient and number of seats.

- ✓ There should be enough space for the library's collections.
- ✓ The library should provide sufficient workspace configured to promote efficient operations to staff.
- ✓ The library should be made accessible to people with some physical disabilities.
- ✓ The library should provide ergonomic workstations.
- ✓ Library facilities should be provided to distant learners.

A modern academic library is expected to operate in these principles, as identified by Yunliang (2001), Openness, multifunctional, flexibility, and artistry. A library should provide free, convenient, and rapid services to the users.

A good library building must provide many functions with recent developments in formats of documents, the ways of reading, the methods of document delivery, and diverse library activities. A new library building now has audio-visual rooms and electronic reading rooms installed with advanced equipment. The library often holds such events as lectures, academic meetings, special seminars, and information workshops.

Library building must be designed and built in such a way as to accommodate any change in library structure and services. The introduction of modern information technology into the library profession has caused a reorganization of library services and structure; new library buildings now follow the principles of flexibility to satisfy the current development in the library information systems and reader services. The aesthetic is an essential factor in the library building. New library building pays attention to the expression of beauty in terms of exterior look, interior layout, artistic design, and natural environment. This makes the library environment attractive and inviting to users.

Sens (2009) Opined that the academic library has evolved into a forum for students to collaborate, enjoy fellowship, engage in healthy debate, create and challenge ideas, and experiential learning and discovery in a multitude of meaningful ways. It is only a right, designed library building that supports these activities.

In building a modern academic library, Faulkner-Brown (1971, Pp. 21-22) identified ten qualities that should be considered as thus:

- ✓ **Flexibility:** with a layout, structure, and services that are easy to adapt.
- ✓ **Compact:** for ease of movement of readers, staff, and books.
- ✓ **Accessible:** from the exterior into the building and from the entrance to all parts of the building, with an easily understandable plan needing minimum supplementary directions.
- ✓ **Extendible:** to permit future growth with minimum disruption.
- ✓ **Varied:** in its provision of book accommodation and of reader services to give full-size freedom of choice.
- ✓ **Organised:** to impose appropriate confrontation between books and readers.
- ✓ **Comfortable:** to promote the efficiency of use.
- ✓ **Constant in the environment:** for the preservation of library materials.

- ✓ **Secure:** to control user behaviour and loss of books.
- ✓ **Economic:** to be built and maintained with minimum resources both in finance and staff.

It is essential to point out that successful library location and design depends to a great extent on close cooperation between the librarian and the architect. The Librarian should be able to describe in clear terms the functional needs of the library. The architect, on the other hand, should possess the ability to translate the client's ideas into a structure that is beautiful, functional, and economical. Both should show understanding and be willing to learn from each other. Lyle (1967) stated that "It is of the most significant importance that there be harmony and mutual respect between the architect and the librarian. It is from the skill of one and the imaginative ideas of the other that good library building must stem.

The environment in which a library operates is crucial in achieving its goals and objectives. Library managers need to analyse the environment in which they operate critically. Bryson (1998, pp.52-75) has listed the environmental factors that impact on information services as:

- ✓ Economic conditions
- ✓ Availability of financial resources
- ✓ Geographical situation
- ✓ Degree of technological integration and innovation
- ✓ Historical development of the parent organisation
- ✓ Customers and markets
- ✓ Demographic pattern
- ✓ Labour market and industrial relations
- ✓ Cultural and social conditions
- ✓ Political climate

Corrall (1994) asserts that strategic planning fulfills the dual role of relating an organisation and its people to the environment and providing unity and direction to its activities. Modern libraries are relevant to this present age. Librarians, architects, and the users are collaborating to produce elegant and functional allocations and purposes that incorporate flexibility and comfort to create an environment that is welcoming and supports a range of research and learning activities. The learning environment in the library should be attractive enough to study better than the home environment.

## **Methodology**

The study adopted a survey research design. The Principle of this research design was to seek the opinion of library users encompassing students and staff in addressing the problem of the Factors Affecting the use of the Medical Library, College of Medicine and Health Sciences, Bingham University, Jos Campus. The target population for this study was the staff and students of the College of

Medicine and Health Sciences, Bingham University, Jos Campus. Simple Random Sampling was used in the Study. Fifty (50) users were selected to participate in the study. A questionnaire was used as the main instrument for data collection. Fifty (50) questionnaire was distributed, all filled and returned and was found valid for analysis, thereby giving a response rate of One Hundred (100%) percent. Data collected were analysed using descriptive statistics represented in frequency, percentages, mean scores, and standard deviation.

## Results and Discussion

Fifty (50) copies of questionnaire were administered to the respondents, all the fifty (50) questionnaires representing 100% were duly completed, returned, and found useful for the analysis. The tables below present the responses of the respondents.

**Table 1: Effects of the College Library Location on Staff and Users**

	Effects	SA	%	A	%	U	%	D	%	SD	%	Total F	Total %	Mean	STD
1.1	Low patronage	21	42	20	40	4	8	4	8	1	2	50	100 %	1.88	1.003
1.2	Distraction	11	22	15	30	3	6	13	26	8	16	50	100	2.84	1.448
1.3	Scepticism on library services	9	18	10	20	15	30	9	18	7	14	50	100	2.09	1.298
1.4	Poor research output	8	16	17	34	16	32	6	12	3	6	50	100	2.58	1.09

**Key:** SA=Strongly Agreed, A=Agreed, U=Undecided, D=Disagreed, SD=Strongly Disagreed

### Table 1

**1.1: Low patronage:** 21 (42%) respondents strongly agreed, while 20 (40%) agreed, 4(8%) were undecided, 4 (8%) disagreed while 1 (2%) strongly disagreed. The cumulative percentage of respondents who agreed to this assertion stood at 82 %with a mean of 1.88 and a standard deviation of 1.003. This shows that the college library location may be responsible for low patronage in the library.

**1.2: Distraction:** 11 (22%) strongly agreed, 15 (30%) agreed, 3 (6%) were undecided, 13 (26%) disagreed while 8 (16%) strongly disagreed. The cumulative percentage of those who agreed to this effect is 52% as against those who disagreed at 42%, with a mean of 2.84 and a standard deviation of 1.448. This indicates that distraction may be another effect of the location of the college library.

**1.3: Scepticism on library services:** Those who strongly agreed to this effect were 9(18%), 10 (20%) agreed, 15 (30%) were undecided, 9(18%) disagreed while 7 (14%) strongly disagreed. The percentage of respondents who were undecided and those who do not agree with this assertion cumulatively stood at 62%, with a mean score of 2.9 and a standard deviation of 1.298. This indicates that users of the college library still have confidence in the college library services.

**1.4: Poor research output:** Respondents who strongly agreed were 8 (16%), 17 (34%) respondents agreed, 16 (32%) were undecided, while 6 (12%) and 3 (6%) respondents disagreed and strongly disagreed respectively. This shows that research activities were affected as the cumulative percentage of respondents who agreed stood at 50%. The mean score was 2.58, and the standard deviation was 1.09.

**Table 2: the factors Affecting Users' Patronage of the College Library**

	Factors	SA	%	A	%	U	%	D	%	SD	%	F	%	Mean	STD
2.1	Location of the library	23	46	18	36	4	8	5	10			50	100	1.82	0.962
2.2	Music and noises from lecture halls, hostels and staff quarters	12	24	26	52	5	10	5	10	2	4	50	100	2.18	1.044
2.3	Inadequate internet access	22	44	15	30	8	16	5	10			50	100	1.92	1.007
2.4	Inadequate power supply	13	26	21	42	4	8	10	20	2	4	50	100	2.34	1.189
2.5	Leaking roof in the library	11	22	15	30	9	18	9	18	6	12	50	100	2.68	1.332
2.6	Lack of conveniences(Toilets) in the library	20	40	11	22	5	10	12	24	2	4	50	100	2.30	1.329
2.7	Inadequate offices/ space for librarians and library staff	15	30	13	26	5	10	13	26	4	8	50	100	2.56	1.373

**Key: SA=Strongly Agreed, A=Agreed, U=Undecided, D=Disagreed, SD=Strongly Disagreed**



**2.1: Location of the library:** 23 (46%) respondents strongly agreed, 18 (36%) agreed, 4 (8%) were undecided, and 5 (10%) respondents disagreed. The cumulative percentage of respondents who agreed to this factor stood at 82%, which was a clear indication that the location of the college library affects users' patronage of it as mean score records 1.82 and standard deviation recording 0.962.

**2.2: Music and noises from lecture halls, hostels and staff quarters:** Analysis shows that 12 (24%) respondents strongly agreed, 26 (52%) respondents agreed to this factor, 5 (10%) were undecided. In comparison, 5 (10%) and 2 (4%) respondents disagreed and strongly disagreed, respectively. The mean score recorded 2.18, and the standard deviation recorded 1.044. This analysis is a clear indication that music and noises from lecture halls, hostel accommodations, and staff quarters may be one of the factors that affect users' patronage of the college library.

**2.3: Inadequate Internet access:** 22 (44%) respondents strongly agreed, 15 (30%) agreed, 8 (16%) respondents undecided and 5 (10%) respondents disagreed. Mean score records 1.92 and standard deviation recorded 1.007. A cumulative percentage of respondents who agreed on records 74%, which means that inadequate internet access, could be one of the factors that affect users' patronage of the college library.

**2.4: Inadequate power supply:** The result shows that 13 (26%) respondents strongly agreed, 21 (42%) agreed, 4 (8%) were undecided. In comparison, 10 (20%) and 2 (4%) respondents disagreed and strongly disagreed, respectively, with a mean score of 2.34 and a standard deviation of 1.189. Therefore, inadequate power supply affects internet accessibility, and so could be one of the factors that affect users' patronage in the college library.

**2.5: Leaking roof in the library:** The analysis shows that 11 (22%) of the respondents strongly agreed, 15 (30%) agreed, 9 (18%) were undecided, 9 (18%) disagreed while 6 (12%) of the respondents strongly disagreed. The mean score was 2.68, and the standard deviation was 1.332. This indicates that this factor might have affected library patronage.

**2.6: Lack of conveniences (toilets) in the library:** 20 (40%) of the respondents strongly agreed, 11 (22%) agreed, 5 (10%) undecided, 12 (24%) disagreed while 2 (4%) strongly disagreed. The cumulative percentage of respondents who agreed that this factor might have affected the patronage in the library stood at 62% as users have to move out of the library environment to relieve themselves. The mean score recorded 2.3, and the standard deviation was 1.329.

**2.7: Inadequate offices/space for librarians and library staff:** The analysis shows that 15 (30%) strongly agreed, 13 (26%) agreed, 5 (10%) undecided, 13 (26%)

disagreed and 4 (8%) strongly disagreed with a mean score of 2.56 and a standard deviation of 1.375. The analysis indicates that this could be one of the factors that affect users' patronage in the college library.

**Table 3: Possible Solutions to the Identified Problems of the College Library**

Solutions	SA	%	A	%	U	%	D	%	SD	%	Total F	Total %	Mean	STD
3.1 A new library should be built in a serene and convenient environment	26	52	17	34	2	4	4	8	1	2	50	100	1.74	1.006
3.2 The college library should be relocated to an alternative building	15	30	24	48	5	10	3	6	3	6	50	100	2.1	1.093
3.3 Offices, users' and staff conveniences should be created in the present library	19	38	17	34	5	10	8	16	1	2	50	100	2.1	1.147
3.4 College library should be adequately funded for constant power supply and internet accessibility	27	54	20	40	1	2	2	4			50	100	1.56	0.733

**Key:** SA=Strongly Agreed, A=Agreed, U=Undecided, D=Disagreed, SD=Strongly Disagreed

**3.1: A New library complex should be built in a serene and convenient environment:** 26 (52%) respondents strongly agreed, 17 (34%) agreed, 2 (4%) undecided, 4 (8%) disagreed while 1 (2%) strongly disagreed. By this analysis, the cumulative percentage of those who agreed on a new library complex should be built in a serene and environment that was outstanding at 86%, with a mean of 1.74 and a standard deviation of 1.006. This is an indication that the college needs a new library to be built in a convenient place.

**3.2: The College Library should be relocated to an alternative building:** 15 (30%) respondents strongly agreed, 24 (48%) agreed, 5 (10%) undecided, 3 (6%) disagreed, and 3 (6%) strongly disagreed. The mean for this variable was 2.1, while the standard deviation was 1.093. The cumulative percentage of respondents who were undecided and those who opposed insignificantly stood at 22%, while that of those who agreed on stood at 78%. This shows that the college library could be moved to an alternative building for better services.

**3.3: Offices users' and staff's conveniences (Toilets) should be created in the modern library:** This analysis shows 19 (38%) respondents strongly agreeing to this solution and 17 (34%) agreeing, 5 (10%) were undecided, 8 (16%) and 1 (2%) disagreed and strongly disagreed respectively. The mean for this variable stood at

2.1, and the standard deviation recorded 1.147. The present library could be modified to accommodate offices and conveniences.

**3.4: College library should be adequately funded for constant power supply and internet accessibility:** 27 (54%) respondents strongly agreed, 20 (40%) agreed, 1 (2%) undecided and 2 (4%) strongly disagreed with a mean of 1.56 and a standard deviation of 0.733. The library needs to be funded for better services to its users.

## **Conclusion**

The study assessed library users on factors affecting the use of a Medical Library, with a particular interest in the Medical Library, College of Medicine and Health Sciences, Bingham University, Jos Campus. From the findings of the study, it could be deduced that the location of the College Library, which is surrounded by lecture halls, hostel accommodations, and staff quarters, may be responsible for low patronage in the library. Activities surrounding the college library, according to the, cause distraction, like music and other noises emanating from lecture halls, hostel accommodations, and staff quarters exceedingly inconvenient library users and staff. The roof of the college library has serious leakages during rainy seasons so much that library users were usually forced to move out of their seats, and sometimes out of the library, while library staff improvises to curtail damages to the information resources in the library. The actions of the library staff in reducing losses to information resources are always lacking when rain falls at night.

Based on the analysis, lack of users and staff conveniences (Toilets) in the library is another factor affecting the use of the Medical Library. This often prompts library users and staff to suspend their studies and commitments to move out and away from the College Library just to empty their bowels, thereby losing valuable time and energy that could have been invested into their studies and engagements as well. It is noteworthy to mention that the College Librarian's office is entirely detached from the block of building housing the College Library for want of space. This does not encourage the Librarian to be professional and efficient in the discharge of his duties. Inadequate Internet access due to insufficient funding also affects the library patronage. The analysis indicates that despite the adverse effects that the location of the library has on users, they still have confidence in library services rendered. This shows that library patronage and services could be enhanced if the problems identified are critically addressed.

## **Recommendations**

Based on the findings of this study, the following recommendations were made:

1. The College Library should be relocated to a convenient alternative building. The building should be attractive to library users and should be easily accessible, or a new library complex should be built in a very conducive area. The new building should have offices for librarians and conveniences (toilets)

for library users and staff. This would positively enhance patronage and service delivery.

2. Alternatively, the building housing the College Library should be intensively repaired to address the problem of roof leakages and cracks to forestall further damages to property and even lives.
3. The College Library should be adequately funded for constant power supply, and Internet accessibility to library users and staff as this will boost a higher research output.

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