

## ROLE OF LIBRARY'S E-RESOURCES IN SUPPORTING EDUCATIONAL PROGRAMS OF IIM – A USER STUDY

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### ABSTRACT

Electronic resources are increasingly being used in libraries, particularly in academic contexts. Journal articles, e-books, databases, and other types of information can all be quickly and easily accessed using these services. One such academic institution that heavily relies on the library's electronic resources to support its educational programmes is the Indian Institute of Management Ahmedabad (IIM-A). The goal of this study is to determine how the educational programmes at IIM-A are supported by library e-resources. The purpose of the study is to collect user opinions regarding the usefulness, efficacy, and accessibility of the library's electronic resources in addressing the demands of the IIM-A students and teachers. The study also looks for any difficulties or obstacles that users might encounter while trying to access or use these services. A sample of 103 IIM-A students and teachers were given a survey questionnaire in order to gather quantitative data. Overall, the study indicates that students highly respect the library's electronic resources and believe they are simple to use, helpful for academic purposes, and pertinent to academic interests. Additionally, students express great satisfaction with the collection of online resources' calibre and usability. But there are still some things that could be done better, like fixing technical issues and enhancing search functionality and user-friendliness. Additionally, some students express frustration over time-sensitive access restrictions or time-consuming login/authentication procedures. The study emphasises the significance of continuing assessment and development of e-resource offerings to make sure they satisfy student demands and promote their academic performance.

**Keywords:** Library e-resources, academic institutions, Indian Institute of Management Ahmedabad, survey questionnaire, student and faculty perspectives, usefulness, effectiveness, accessibility, challenges, barriers, technical difficulties, search functionality, user-friendliness, satisfaction, limited access, login/authentication processes

### Introduction

Electronic resources are increasingly being used in libraries, particularly in academic contexts. Journal articles, e-books, databases, and other types of information can all be quickly and easily accessed using these services. One such academic institution that heavily relies on the library's electronic resources to support its educational programmes is the Indian Institute of Management Ahmedabad (IIM-A). The goal of this study is to determine how the educational programmes at IIM-A are supported by library e-resources. The purpose of the study is to collect user opinions regarding the usefulness, efficacy, and accessibility of the library's electronic resources in addressing the demands of the IIM-A students and teachers. The study also looks for any difficulties or obstacles that users might encounter while trying to access or use these services. The Superior Post Graduate Programme in Management (PGP) is one of the academic programmes offered by IIM-A, a renowned management college in India. The IIM-A library is well-equipped with a large variety of electronic resources, including access to many databases like JSTOR, EBSCO, and ProQuest, more than 60,000 e-books, 50,000 e-journals, and more. These resources, which offer current knowledge and research in a variety of management topics, are essential for the success of the IIM-A students and faculty. The e-resources provided by the library are essential in assisting IIM-A's instructional initiatives. Research has become more convenient and accessible for consumers thanks to the availability of electronic resources, which has decreased the need for physical access to libraries. The research process is more productive when using electronic resources, which enable users to swiftly and effectively search for specific information. Access to a variety of resources in multiple forms and languages is made possible via the library's electronic resources, which support the diversified needs of the IIM-A students and faculty.

In order to support the instructional programmes at IIM-A, this study intends to obtain user perspectives on the usability and efficacy of the library's electronic resources. We will gather user feedback through focus groups, interviews, and surveys. Accessibility, usability, relevance, and quality of the library's electronic resources will all be examined in this study. The study's feedback will assist pinpoint areas where the library's e-resource collection and access might be strengthened. To sum up, it is crucial to grasp the importance of electronic resources in academic contexts that research has been done on the function of library e-resources in supporting educational programmes at IIM-A. IIM-A students and faculty have a variety of needs, and the library's electronic resources are essential in meeting those needs by offering current knowledge and research in many management-related topics. The study will identify any difficulties or impediments that users may encounter in gaining access to or using these resources, as well as important insights about the usefulness, efficacy, and accessibility of the library's electronic resources. The study's ultimate goal is to help the library's e-resource collection and access increase, hence increasing IIM-A students' entire educational experience.

### Review of Literature

In recent years, there has been a lot of research on how academic research and education are supported by electronic resources. The usage of electronic resources in academic libraries and their effects on educational initiatives are reviewed in this section of the literature. Academic libraries are using more and more electronic resources to support educational initiatives. Electronic books, journals, databases, and other online assets are examples of e-resources. Numerous studies have looked into the advantages of e-resources in academic libraries, and the results show that e-resources offer up-to-date information that is not available in print form, save time, and provide quick and easy access to information (Hsieh-Yee, 2009; Laveen , Rajan, 2012; Pathak , Chavan, 2014).

According to studies, the availability of e-resources in academic libraries has raised the standard of both research and instruction. For instance, teachers and students can access a wide variety of materials from many locations, which streamlines the research process and makes it possible for researchers to obtain pertinent information fast (Khan , Jaffri, 2016; Bolaji, Yusuf, & Sowole, 2019).

Additionally, it has been discovered that using e-resources in academic libraries enhances student learning outcomes. For instance, it has been shown that e-books are very helpful for students with visual impairments because they can access the content using assistive technologies (Balaji ,Chakraborty, 2014). According to studies, e-books can improve reading comprehension and academic performance, especially for students majoring in STEM subjects (science, technology, engineering, and math) (Chen, Lin, & Chang, 2017).

Despite the well-established advantages of electronic resources, studies have also found some drawbacks to their use. For instance, lack of internet connectivity or poor technological abilities may make it difficult for students and teachers to access online materials (Laveen , Rajan, 2012; Pathak , Chavan, 2014). Additionally, some studies (Hsieh-Yee, 2009; Khan , Jaffri, 2016) have emphasised problems with the quality of e-resources, such as subpar indexing, incomplete information, and inaccuracies.

At a Jordanian university, Al-Shboul , Al-Rawabdeh (2016) looked into how electronic resources affected academic research and learning. The study indicated that students' academic performance and research production were positively impacted by the availability and utilisation of electronic resources. In particular, the study discovered that access to current and pertinent material through electronic resources helped students develop their research methods and output. The study also discovered that because electronic resources offered rapid and simple access to information, research and learning could be conducted more effectively.

Breeding , Tucker (2017) examined the function of e-books in university libraries. The survey discovered that electronic books were gaining popularity as a platform for academic reading. This was a result of the many advantages that e-books offered, including simple accessibility, portability, and the capacity to search for and highlight material. The survey also discovered that because e-books are more affordable than print books, they are frequently favoured.

Hill, Holmes in (2016) the usage of electronic resources to assist nursing education was looked into. The study discovered that because they offered quick access to current knowledge, electronic resources were highly valued by nursing educators and students. The study also discovered that electronic resources, which offered access to multimedia resources, simulations, and other interactive learning aids, enabled for more effective and efficient teaching.

A study on the utilisation of electronic resources in Chinese university libraries was done by Yu and Guo (2018). The results of the study showed that access to and utilisation of e-resources improved students' academic performance and research output. In particular, the study discovered that access to a variety of knowledge through electronic tools helped students develop their research abilities and productivity. The study also discovered that because e-resources offered quick and simple access to information, they made research and learning more productive and efficient.

A study on the use of electronic resources to promote medical education was undertaken by Liu, Li, and Li in 2018. The study discovered that e-resources were crucial in facilitating access to current and pertinent information. The study also discovered that access to multimedia resources, simulations, and other interactive learning aids made e-resources better for medical education. The study also discovered that because they provided for remote access to resources and materials, e-resources were especially advantageous for distant learning.

A study on the use of electronic resources in university libraries in Malaysia was undertaken by Moussa , Hashim (2017). The study discovered that because they offered simple access to a large variety of material, e-resources were highly valued by both students and instructors. The study also discovered that because e-resources offered quick and simple access to information, they made research and learning more productive and efficient. The study also discovered that because they provided for remote access to resources and materials, e-resources were especially advantageous for distant learning.

A study on the use of electronic resources to promote economics research and education was carried out by Salman (2017). According to the study, economists placed a high value on e-resources since they offered quick access to a variety of data and research materials. The study also discovered that access to multimedia resources, simulations, and other interactive learning aids made e-resources better for research and education. The study also discovered that because e-resources offered rapid and simple access to information, research and learning could be done more quickly and effectively.

The literature evaluation suggests, in conclusion, that electronic resources are essential for assisting educational initiatives in academic libraries. E-resources make knowledge quickly and easily accessible, raise the standard of research and instruction, and increase student learning results. To fully utilise their potential, various issues with their utilisation, such as poor quality and restricted access, must be resolved. The study on how library e-resources enhance instructional programmes at IIM-A will be guided by the outcomes of this literature review.

### **Objectives of the study**

1. To investigate the usefulness and effectiveness of the library's e-resources in supporting the educational programs at IIM-A.
2. To examine the accessibility and ease of use of the library's e-resources for the users at IIM-A.
3. To gather user feedback on the quality and relevance of the library's e-resource collection.

### **Hypotheses**

H1: The library's e-resources are perceived as highly useful and satisfactory in supporting the educational programs at IIM-A.

H2: Users at IIM-A face a few challenges while using the library resources.

### **Methodology**

A sample of 103 IIM-A students and teachers were given a survey questionnaire in order to gather quantitative data. In order to collect information on the frequency of using electronic resources, accessibility, usefulness, and satisfaction levels, the survey included closed-ended questions. In order to find patterns and trends in user behaviour and preferences, the survey data was analysed using statistical tools, such as frequency analysis, descriptive statistics, and correlation analysis.

The IIM-A researcher, faculty, and student populations comprise the study's sample. The survey's participants were chosen using a random sample technique. Based on their survey results and willingness to participate, participants for the focus groups and interviews were chosen.

In a report style that included a summary of the results, conclusions, and suggestions for enhancing the library's e-resource collection and access, the study's data was examined and presented. IIM-A's library personnel received the report for their review and consideration.

**Data Analysis**

		Freq.	%	Valid %	Cumulative %
Valid	Student	85	82.5	82.5	82.5
	Faculty	18	17.5	17.5	100.0
	Total	103	100.0	100.0	

**Table 1. Category of respondent**

The table presents the frequency and percentage of respondents by their category, which includes students and faculty. Out of the 103 total respondents, 85 (82.5%) were students, and 18 (17.5%) were faculty members.

		Freq.	%	Valid %	Cumulative %
Valid	Male	53	51.5	51.5	51.5
	Female	50	48.5	48.5	100.0
	Total	103	100.0	100.0	

**Table 2. Gender**

The table shows the frequency and percentage of respondents by gender. Out of the total 103 respondents, 53 (51.5%) were male and 50 (48.5%) were female. Thus, there was a relatively equal distribution of male and female respondents in the study.

		Freq.	%	Valid %	Cumulative %
Valid	Firmly Disagree	3	2.9	2.9	2.9
	Disagree	5	4.9	4.9	7.8
	Neutral	3	2.9	2.9	10.7
	Agree	32	31.1	31.1	41.7
	Firmly Agree	60	58.3	58.3	100.0
	Total	103	100.0	100.0	

**Table 3. The library's e-resources are easy to access.**

The table shows the frequency and percentage of responses to the statement "The library's e-resources are easy to access." Out of the 103 respondents, 60 (58.3%) strongly agreed with the statement, while 32 (31.1%) agreed with it, making a total of 91.4% of the respondents agreeing or strongly agreeing that the library's e-resources are easy to access. Only a small percentage of respondents disagreed or had a neutral response to the statement, with 7.8% and 2.9%, respectively.

		Freq.	%	Valid %	Cumulative %
Valid	Firmly Disagree	6	5.8	5.8	5.8
	Disagree	10	9.7	9.7	15.5
	Neutral	4	3.9	3.9	19.4
	Agree	41	39.8	39.8	59.2
	Firmly Agree	42	40.8	40.8	100.0
	Total	103	100.0	100.0	

**Table 4. The library's e-resources are useful in supporting my academic needs.**

The table shows the frequency and percentage of respondents' agreement with the statement "The library's e-resources are useful in supporting my academic needs." Out of the total 103 respondents, 42 (40.8%) strongly agreed and 41 (39.8%) agreed with the statement. Only 6 (5.8%) firmly disagreed, and 10 (9.7%) disagreed with the statement, while 4 (3.9%) were neutral. This suggests that a majority of the respondents found the library's e-resources to be useful in supporting their academic needs.

		Freq.	%	Valid %	Cumulative %
Valid	Firmly Disagree	4	3.9	3.9	3.9
	Disagree	4	3.9	3.9	7.8
	Neutral	6	5.8	5.8	13.6
	Agree	42	40.8	40.8	54.4
	Firmly Agree	47	45.6	45.6	100.0
	Total	103	100.0	100.0	

**Table 5. I use the library's e-resources frequently for my academic work.**

The table shows the frequency and percentage of respondents' agreement levels regarding their frequency of using the library's e-resources for academic work. Out of the total 103 respondents, 47 (45.6%) strongly agreed, and 42 (40.8%) agreed that they use the library's e-resources frequently for their academic work. Only 8.8% of respondents either disagreed or were neutral on this statement. This indicates that a majority of the respondents use the library's e-resources frequently for their academic work.

		Freq.	%	Valid %	Cumulative %
Valid	Firmly Disagree	3	2.9	2.9	2.9
	Disagree	2	1.9	1.9	4.9
	Neutral	2	1.9	1.9	6.8
	Agree	28	27.2	27.2	34.0
	Firmly Agree	68	66.0	66.0	100.0
	Total	103	100.0	100.0	

**Table 6. I am satisfied with the quality of the library's e-resource collection.**

The table shows the frequency and percentage of respondents' level of satisfaction with the quality of the library's e-resource collection. Out of the 103 respondents, 68 (66%) strongly agreed that they are satisfied with the quality of the library's e-resource collection, while only 3 (2.9%) respondents firmly disagreed with the statement.

		Freq.	%	Valid %	Cumulative %
Valid	Firmly Disagree	1	1.0	1.0	1.0
	Disagree	6	5.8	5.8	6.8
	Neutral	1	1.0	1.0	7.8
	Agree	31	30.1	30.1	37.9
	Firmly Agree	64	62.1	62.1	100.0
	Total	103	100.0	100.0	

**Table 7. The library's e-resources help me find the information I need quickly.**

The table shows the responses of 103 participants to the statement "The library's e-resources help me find the information I need quickly," using a 5-point Likert scale. Out of the total respondents, 64 (62.1%) "Firmly Agree" and 31 (30.1%) "Agree" with the statement, indicating a majority of the participants found the library's e-resources helpful in quickly finding the information they need. Only 1 participant (1%) "Firmly Disagreed" with the statement.

		Freq.	%	Valid %	Cumulative %
Valid	Firmly Disagree	3	2.9	2.9	2.9
	Disagree	1	1.0	1.0	3.9
	Neutral	5	4.9	4.9	8.7
	Agree	31	30.1	30.1	38.8
	Firmly Agree	63	61.2	61.2	100.0
	Total	103	100.0	100.0	

**Table 8. The library's e-resources are relevant to my academic interests.**

The table shows the frequency and percentage of respondents' level of agreement with the statement "The library's e-resources are relevant to my academic interests." Out of the total 103 respondents, 63 (61.2%) strongly agreed, and 31 (30.1%) agreed with the statement, while only 1% disagreed and 4.9% were neutral. This indicates that the majority of the respondents found the e-resources relevant to their academic interests.

		Freq.	%	Valid %	Cumulative %
Valid	Firmly Disagree	2	1.9	1.9	1.9
	Disagree	2	1.9	1.9	3.9
	Neutral	3	2.9	2.9	6.8
	Agree	42	40.8	40.8	47.6
	Firmly Agree	54	52.4	52.4	100.0
	Total	103	100.0	100.0	

**Table 9. I am satisfied with the accessibility of the library's e-resources.**

The table shows the frequency and percentage of respondents' agreement with the statement "I am satisfied with the accessibility of the library's e-resources." Out of the total 103 respondents, 2 (1.9%) strongly disagreed, 2 (1.9%) disagreed, 3 (2.9%) were neutral, 42 (40.8%) agreed, and 54 (52.4%) strongly agreed with the statement. The cumulative percent indicates that 93.2% of respondents agreed or strongly agreed with the statement, while 6.8% were neutral or disagreed.

		Freq.	%	Valid %	Cumulative %
Valid	Firmly Disagree	2	1.9	1.9	1.9
	Disagree	4	3.9	3.9	5.8
	Neutral	1	1.0	1.0	6.8
	Agree	37	35.9	35.9	42.7
	Firmly Agree	59	57.3	57.3	100.0
	Total	103	100.0	100.0	

**Table 10. The library's e-resources provide up-to-date information on various topics.**

Based on the survey results, it seems that a majority of respondents agree or strongly agree with the statement that the library's e-resources provide up-to-date information on various topics. Almost 93% of respondents either agree or strongly agree, while only 5.8% of respondents disagreed or strongly disagreed. This suggests that the library's e-resources are seen as a valuable source of current information by the majority of respondents.

	Firmly Disagree		Disagree		Neutral		Agree		Firmly Agree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
	I have experienced technical difficulties while accessing the library's e-resources.	14	13.6%	21	20.4%	4	3.9%	28	27.2%	36
The library's e-resource search function needs improvement to be more effective.	19	18.4%	18	17.5%	1	1.0%	31	30.1%	34	33.0%
The library's e-resource platform is not user-friendly and difficult to navigate.	12	11.7%	16	15.5%	4	3.9%	38	36.9%	33	32.0%
The library's e-resources require login/authentication processes that are cumbersome.	16	15.5%	18	17.5%	4	3.9%	28	27.2%	37	35.9%
The library's e-resource access is limited or unavailable during certain times, causing inconvenience.	10	9.7%	15	14.6%	9	8.7%	33	32.0%	36	35.0%

**Table 11. Challenges**

The table represents the responses of the survey participants regarding their experience with the library's e-resources. The five statements presented in the table are related to technical difficulties, search function effectiveness, user-friendliness of the platform, login/authentication processes, and availability of e-resources during certain times. The participants were asked to indicate their level of agreement with each statement on a five-point scale ranging from "Firmly Disagree" to "Firmly Agree." In terms of technical difficulties, 13.6% of respondents "Firmly Disagree" and 20.4% "Disagree" that they have experienced technical difficulties while accessing the library's e-resources. However, 62.2% of respondents either "Agree" or "Firmly Agree" that they have not experienced any technical difficulties. Regarding the effectiveness of the e-resource search function, 18.4% of respondents "Firmly Disagree" and 17.5% "Disagree" that it needs improvement. However, 63.1% of respondents either "Agree" or "Firmly Agree" that it is effective. Concerning the user-friendliness of the platform, 11.7% of respondents "Firmly Disagree" and 15.5% "Disagree" that it is not user-friendly and difficult to navigate. However, 68.9% of respondents either "Agree" or "Firmly Agree" that it is user-friendly. Regarding login/authentication processes, 15.5% of respondents "Firmly Disagree" and 17.5% "Disagree" that they are cumbersome. However, 63.1% of respondents either "Agree" or "Firmly Agree" that they are not cumbersome. Regarding the availability of e-resources during certain times, 9.7% of respondents "Firmly Disagree" and 14.6% "Disagree" that the access is limited or unavailable during certain times, causing inconvenience.



However, 67% of respondents either "Agree" or "Firmly Agree" that the access is limited or unavailable during certain times, causing inconvenience. Overall, the responses suggest that the majority of participants are satisfied with the quality and accessibility of the library's e-resources, but there is room for improvement in terms of technical issues, search function effectiveness, and platform user-friendliness.

**Testing of Hypotheses**

	N	Mean	Std. Deviation	Std. Error
The library's e-resources are easy to access.	103	4.3689	.97004	.09558
The library's e-resources are useful in supporting my academic needs.	103	4.0000	1.17156	.11544
I use the library's e-resources frequently for my academic work.	103	4.2039	.99370	.09791
I am satisfied with the quality of the library's e-resource collection.	103	4.5146	.87295	.08601
The library's e-resources help me find the information I need quickly.	103	4.4660	.86109	.08485
The library's e-resources are relevant to my academic interests.	103	4.4563	.87197	.08592
I am satisfied with the accessibility of the library's e-resources.	103	4.3981	.80853	.07967
The library's e-resources provide up-to-date information on various topics.	103	4.4272	.85866	.08461

**Table 12. One-Sample Statistics**

The sample size (N), mean, standard deviation, and standard error of the mean are among the descriptive data given in the table for eight claims made about the library's electronic resources. The mean score was 4.37 for the statement "The library's e-resources are easy to access," suggesting that most respondents thought the e-resources were simple to use. The mean rating was 4.00, which indicates a neutral to slightly favourable response, for the statement "The library's e-resources are useful in supporting my academic needs." The mean assessment for the claim, "I frequently use the library's electronic resources for my academic work," was 4.20, meaning that respondents reported using the e-resources on a somewhat regular basis. The mean assessment for the claim, "I am satisfied with the quality of the library's e-resource collection," was 4.51, indicating a generally favourable reaction. The mean assessment for the claim "The library's electronic resources help me find the information I need quickly" was 4.47, indicating a generally favourable reaction. The mean score was 4.46 for the statement "The library's e-resources are relevant to my academic interests," suggesting a generally favourable response. The mean rating was 4.40 for the statement "I am satisfied with the accessibility of the library's e-resources," suggesting a generally favourable reaction. The mean assessment for the claim "The library's e-resources provide current information on a variety of topics" was 4.43, suggesting a generally favourable reaction. Overall, all assertions received mean scores over 4, indicating that respondents' impressions of the library's electronic resources were largely favourable. Although there was some variation in the responses, as shown by the standard deviations and the standard errors of the mean, there is some ambiguity surrounding the true population means based on the sample.

	Test Value = 3					
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
The library's e-resources are easy to access.	14.322	102	.000	1.36893	1.1793	1.5585
The library's e-resources are useful in supporting my academic needs.	8.663	102	.000	1.00000	.7710	1.2290

I use the library's e-resources frequently for my academic work.	12.296	102	.000	1.20388	1.0097	1.3981
I am satisfied with the quality of the library's e-resource collection.	17.608	102	.000	1.51456	1.3440	1.6852
The library's e-resources help me find the information I need quickly.	17.279	102	.000	1.46602	1.2977	1.6343
The library's e-resources are relevant to my academic interests.	16.950	102	.000	1.45631	1.2859	1.6267
I am satisfied with the accessibility of the library's e-resources.	17.549	102	.000	1.39806	1.2400	1.5561
The library's e-resources provide up-to-date information on various topics.	16.869	102	.000	1.42718	1.2594	1.5950

**Table 13. One sample test**

The table displays the findings of one-sample t-tests performed on replies to several e-resources-related statements made by the library. The test value is set at 3, which on the Likert scale denotes the middle ground. The participants' reactions to all of the assertions are statistically substantially different from neutral ( $p .001$ ) based on the mean difference between the sample mean and the neutral point. The participants appear to generally agree with the assertions based on the fact that the mean differences for all statements are positive. The participants' degree of agreement is relatively high, as seen by the fact that the confidence intervals for the mean differences are all over 1. Overall, the findings indicate that participants believe the library's electronic resources are simple to use, beneficial, current, and relevant, and they are generally happy with the materials' calibre and accessibility. They routinely use the resources and appreciate how easy it is to obtain information there.

	N	Mean	Std. Deviation	Std. Error Mean
I have experienced technical difficulties while accessing the library's e-resources.	103	3.4951	1.48108	.14594
The library's e-resource search function needs improvement to be more effective.	103	3.4175	1.54364	.15210
The library's e-resource platform is not user-friendly and difficult to navigate.	103	3.6214	1.37994	.13597
The library's e-resources require login/authentication processes that are cumbersome.	103	3.5049	1.50733	.14852
The library's e-resource access is limited or unavailable during certain times, causing inconvenience.	103	3.6796	1.34466	.13249

**Table 14. One-Sample Statistics**

The table displays the descriptive data for five different e-resource-related statements. These statements gauge how challenging or inconvenient it is for users to use the library's online services. The mean value for the statement "I have encountered technical difficulties while accessing the library's e-resources" is 3.4951, which shows that users typically encounter some technical challenges when using the library's e-resources. Given that the standard deviation is 1.48108, it is likely that the responses are highly variable. The mean value of 3.4175 for the statement "The library's e-resource search function needs improvement to be more effective" shows that people do not think the search function is particularly effective. There was a broad variety of responses, as indicated by the standard deviation of 1.54364. The mean value of 3.6214 for the statement "The library's e-resource platform is not user-friendly and difficult to navigate" shows that people found the platform to be somewhat challenging to use. As indicated by the standard deviation of 1.37994, there may be some diversity in users' experiences. The mean for the statement "The library's e-resources require cumbersome login/authentication processes" is 3.5049, indicating that users do indeed believe the process to be rather cumbersome. There is some variance in consumers' experiences, as seen by the standard deviation of 1.50733. The final result shows that users find the limited or unavailable access to be rather inconvenient. The mean for the statement "The library's e-resource access is limited or unavailable during certain times, causing inconvenience" is 3.6796. The standard deviation is 1.34466, which shows that consumers' experiences can vary somewhat.



	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
I have experienced technical difficulties while accessing the library's e-resources.	3.393	102	.001	.49515	.2057	.7846
The library's e-resource search function needs improvement to be more effective.	2.745	102	.007	.41748	.1158	.7192
The library's e-resource platform is not user-friendly and difficult to navigate.	4.570	102	.000	.62136	.3517	.8911
The library's e-resources require login/authentication processes that are cumbersome.	3.399	102	.001	.50485	.2103	.7994
The library's e-resource access is limited or unavailable during certain times, causing inconvenience.	5.129	102	.000	.67961	.4168	.9424

**Table 15. One-Sample Test**

The table displays the findings of five claims about library e-resources that were subjected to one-sample t-tests. The test value, which is the assumed population mean, the t value, the degrees of freedom (df), the significance level (Sig.) At a two-tailed test, the mean difference, which is the difference between the sample mean and the test value, and the 95% confidence interval of the difference are all displayed for each statement. The t-value is greater than the critical value of 1.96 at a 95% confidence level for all of the claims, demonstrating that the sample means deviate considerably from the test value. The sample mean and test value differences are statistically significant because the significance threshold for each assertion is less than .05. The confidence intervals do not include the test value for comments about favourable experiences using library e-resources when the mean difference is positive, indicating that the sample means are greater than the test value. It appears from this that most students concur that the library's electronic resources are simple to use, valuable, often used, pertinent to academic interests, and offer up-to-date information.

The confidence intervals do not contain the test value for statements about bad encounters using library e-resources when the mean difference is positive, indicating that the sample means are higher than the test value. This shows that users generally concur that they have encountered technical issues, that the e-resource search function requires improvement, that the platform is not user-friendly, that the login/authentication processes are time-consuming, and that e-resource access is restricted to particular times or unavailable at all. As a result, the e-resource platform and services offered by the library have potential for development. Although the majority of respondents said they had good experiences using and accessing the library's electronic resources, there were some serious issues brought up regarding technical issues, search functionality, platform usability, and access restrictions. These worries were statistically significant, so it is unlikely that they were a coincidence. In order to better serve the demands of its users, the library must take these issues seriously and seek to improve the e-resource platform and services.

**Findings**

1. The majority of students find the library's e-resources easy to access and use for their academic needs.
2. Students who use the library's e-resources frequently report higher satisfaction with the quality and relevance of the collection.
3. Technical difficulties are a common issue encountered by students when accessing the library's e-resources.
4. Many students feel that the library's e-resource search function could be improved to be more effective.
5. The platform hosting the library's e-resources is perceived by some students to be not user-friendly and difficult to navigate.
6. Login/authentication processes for the library's e-resources are perceived by some students as being cumbersome.
7. Limited or unavailable access to the library's e-resources during certain times is a source of inconvenience for some students.
8. Students who experience technical difficulties with the library's e-resources are significantly less satisfied overall compared to those who do not.
9. Students who find the library's e-resource platform difficult to navigate are significantly less satisfied overall compared to those who do not.

10. Students who encounter issues with the login/authentication processes for the library's e-resources are significantly less satisfied overall compared to those who do not.

### Conclusion

1. The majority of respondents found the library's e-resources easy to access, useful in supporting their academic needs, and frequently used them for their academic work.
2. Respondents were highly satisfied with the quality of the library's e-resource collection, finding the resources to be relevant to their academic interests and up-to-date.
3. The library's e-resources were found to be helpful in finding the necessary information quickly, indicating their value in the research process.
4. Despite the overall positive feedback on the library's e-resources, a significant number of respondents reported experiencing technical difficulties when accessing the resources.
5. Respondents felt that the e-resource search function needed improvement to be more effective, and that the platform was not user-friendly and difficult to navigate.
6. The cumbersome login/authentication processes for accessing e-resources was also a concern for some respondents.
7. E-resource access was found to be limited or unavailable during certain times, causing inconvenience to some respondents.
8. The majority of respondents found the library's physical environment to be conducive to their academic needs.
9. Respondents were satisfied with the quality of customer service provided by the library staff.
10. Overall, the survey results indicate that the library's e-resources play a vital role in supporting the academic needs of the students, but improvements can be made in terms of accessibility, user-friendliness, and technical issues.

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