

## **Awareness and Use of Web based Online Public Access Catalogue (Web OPAC) by UG Engineering Students of Rajarshi Shahu College of Engineering, Pune: A Case Study**

**\* S. P. Gudi**

\* Librarian, JSPM's Rajarshi Shahu College of Engineering, Tathawade, Pune (Maharashtra) - 411046, INDIA; Email: spgudi@jspmrscoe.edu.in

*Received: 28 October 2024*

*Accepted: 22 June 2025*

---

### **Abstract**

*The present study is focused on the Awareness and use of Web Online Public Access Catalogue (Web OPAC) by UG engineering students of JSPM's Rajarshi Shahu College of Engineering, Pune, **Purpose:** The purpose of this study is to envisage the significance of WEB OPAC in Rajarshi Shahu College of Engineering meant for students. **Research Methodology:** This study has used survey method and distributed questionnaire and collected data through google form. Questionnaire was designed in google form and shared the QR Code among students through Telegram media and asked them to fill it. **Population:** Undergraduate Engineering students of Rajarshi Shahu College of Engineering are considered for this study. **Findings:** The library of J SPM's Rajarshi Shahu College of Engineering is broadly visited by students once in a week , for study, issue/return of books, and to refer books .The study revealed that 57.4% of the respondents are aware about Web OPAC Services and 48.0% of students use it to know the availability of required books in library. Majority 38.8% of students know about web OPAC from their friends. Similarly, 80.0% of students found web OPAC Portal is easy to operate and 59.1% are satisfied with it. Less awareness is the factor among the problems identified as a factor inhabiting the use of library web OPAC. **Conclusion:** It is recommended that Library should create more awareness and effective training for students to enhance the utilization of Web OPAC and library resources. Mallaiah (2014) felt about awareness programme for users in use of library resources and services and in the use of OPAC.*

---

**Key Words:** OPAC, Web OPAC, awareness, catalogue, UG students, Rajarshi Shahu College of Engineering.

### **1. Background**

A Web OPAC is a web based online public access catalogue which represents an advancement in library services. It integrates the different library study resources and give access to users through web-based interface. It is replacement form of traditional card catalogue. Web OPAC is a user-friendly platform accessible through internet. It allows users to explore and locate the existing library study resources. It provides 24/7 access from anywhere in the world. Users can locate books, journals, e-journals and e-books procured by library on this portal. With web OPAC, users can browse the books using different search criteria like title, author, subject and keyword and can view detail information about each resource such as availability and its location with call number.

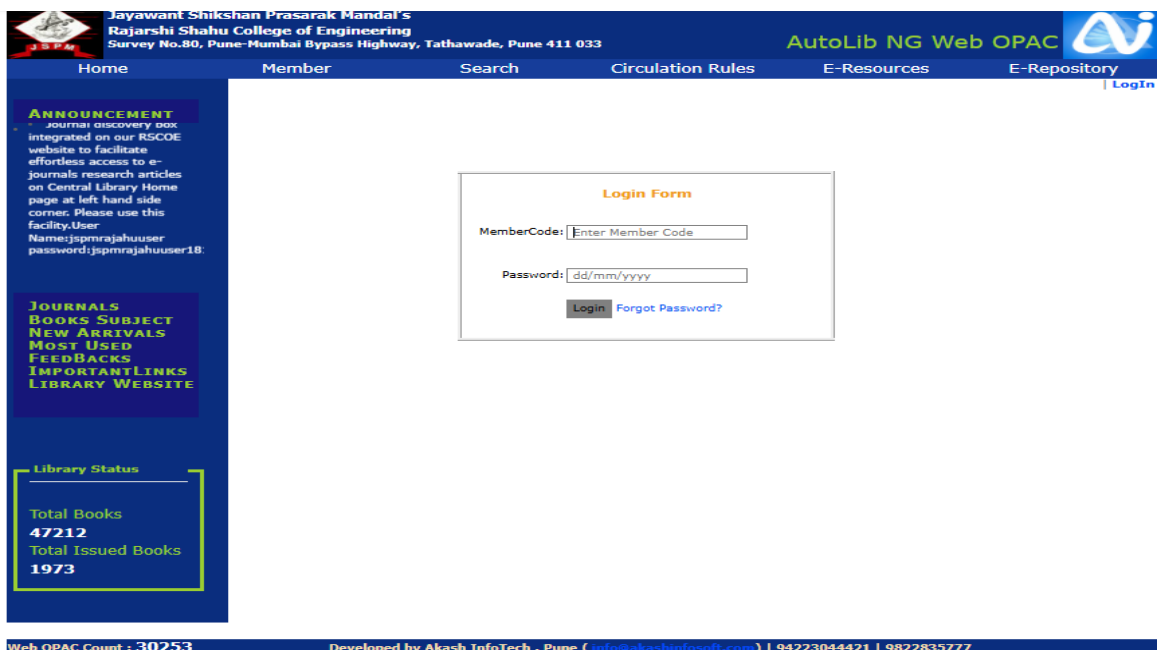


Figure 1: Web OPAC Potral of JSPM's Rajarshi Shahu College of Engineering

## 1.1. About Rajarshi Shahu College of Engineering Library

The Institute Library named as “Jayawant Library” with due respect to Respected Jayawant Sawant father of our Honorable Founder Secretary of JSPM Dr. Prof. Tanaji Jayawant Sawant. in 2010 when Library moved in new A1 Building with new infrastructure. Jayawant Library is enhancing its resources both in print and digital formats. It provides a good ambience to students and staff for study. Its collection comprises with a large collection of books, journals, educational DVDs and CDs for all courses offered through RSCOE. The library has separate reading area, reference section, digital library room, periodicals section etc. Its collection comprises about 43482 books, 108 Print Journals, 1 Lakh+ e-Books, 45000+ E-Journals. The library has subscribed e-journal packages like IEEE All Society Periodicals Package, ASME Digital Collection, ASCE Library, J-Gate Engineering and Technology, J-Gate Social Science and Humanities, ProQuest E-journals and e- Books, e-databases like ProQuest, DELNET and N-List. The library uses social media like Telegram, WhatsApp and E Mail to communicate about updates and notifications of Library periodically. Library has taken renowned outside Library membership like, Automotive Research Association of India, Pune, and IIT Mumbai Central Library for providing resources which are available in respective Libraries. Open access is provided to all the members of the library. The reading materials have been classified according to Dewey Decimal Classification (DDC).

## 2. Significance of the Study

Web OPAC is an important service for library users for accessing learning resources. Online availability of library resources enhances the usage of library resources. Different studies are available on awareness of web OPAC. However, it is essential for all institutes to assess the awareness about their Web OPAC portal among their respective students about its use and its awareness. User experiences are essential to serve them more effectively. And previous studies have not explored about social media used for providing awareness about Web OPAC system among students and also satisfaction about it. Hence this study has been undertaken to know about awareness and use of web OPAC portal among UG engineering students of Rajarshi Shahu College of Engineering.

## 2.1. Library is automated using Integrated Library Management System (ILMS)

JSPM's Rajarshi Shahu College of Engineering Library is automated using AUTOLIB NG Version Integrated Library Management System (ILMS). Library had purchased software in 2011 from Akash Infotech, Pune. Auto Lib software is integrated multi-user, Multi-tasking, user friendly software. All books are barcoded generated through Auto Lib Software. Acquisition, cataloguing, circulation, serial control, OPAC, Reports are the modules which supports library staff to maintain Library services.

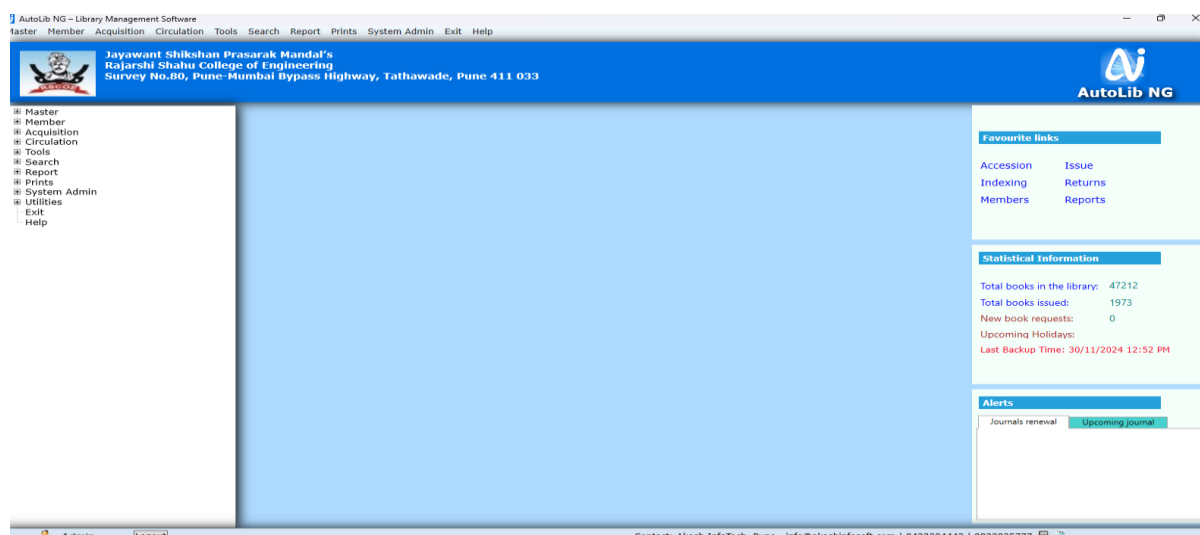


Figure 2: AutoLib NG Version of Library Software

## 3. Objectives

1. To know the frequency of students to visit to library
2. To know the student's purpose to visit library.
3. To know about awareness of the Web OPAC and its use among UG Engineering in Rajarshi Shahu College of Engineering, Pune
4. To understand the purpose to use Web OPAC portal
5. To confirm the source of learning about Web OPAC.
6. To investigate about problems in utilizing Web OPAC portal by students

## 4. Previous Studies

Matonkar and Gauns (2024) depicts from their study as 63.7% of respondents are aware of OPAC and 32.5% use it to locate books within the library, while 30.2% use it to ascertain the availability of required books and 10.7% to reserve books. Surwade and et. al (2023) revealed that 41.08 per cent of respondents consulted OPAC to know the availability and location of a particular book in the library. and 47.08 % of respondents faced Network/Server problems while searching documents on OPAC portal. The author also recommended for providing regular library orientation programs and printed instructions every semester for students with regard to OPAC and printed instructions may be provided to understand the functions of OPAC. Vijayakumar (2019) found from his study as majority of 170 (49.41%) of respondents are using OPAC and found easy to search the documents. Swaminathan (2017) found in his study as majority of respondents were not aware about OPAC System and suggested as Awareness programs need to be conducted by the librarian so as respondents may be aware of OPAC. Veena and et al. (2015) revealed in their study (34.48%) users aware about OPAC from

their friends to search information concerning the library resources. Prakash and et al (2014) examined and found users are less aware about OPAC and book reservation service It was also found that preparation for competitive examination was the main purpose of users to visit library. As for as frequency of visit was concerned maximum users visiting and using library regularly and two to three times in a week. Mallaiah (2014) felt about awareness programme for users in use of library resources and services and in the use of OPAC. Prakash (2013) depicts as OPAC services found satisfactory among respondents. Slow internet connection and inadequate library time found as main constraint indicated by students among all categories for utilization of library. Increasing of Bandwidth and provision of Wi-Fi connection and arrange orientation program are the main suggestions provided by students of all categories to enhance the library services in surveyed institution.

## 5. Type of Research Conducted

The present has been undertaken to assess awareness, use and satisfaction about institute Web OPAC portal among UG Engineering students of JSPM’s Rajarshi Shahu College of Engineering. Hence descriptive study was considered appropriate with survey technique. The survey method used based on pre-determined questionnaire which was designed, distributed and collected data through google form. Google form shared with QR Code among students through Telegram media and asked them to fill it. The data were collected using questionnaire and analyzed the received data employing percentage analysis.

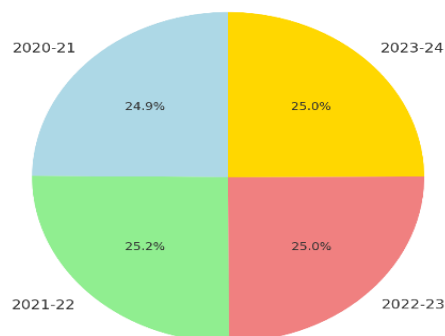
**5.1 Scope and Limitations:** The present study is concerned to the awareness and use of Web OPAC. This study is limited to Users of UG Engineering students of JSPM’s Rajarshi Shahu College of Engineering Pune.

**5.2 Population:** The UG Engineering students from all departments in JSPM’s Rajarshi Shahu College of Engineering constitute population for present study. Rajarshi Shahu College of Engineering is situated in Pune, Maharashtra State in India. As per details available in institute following are the number of registered users in the category of UG Engineering Students. As the research started during the year 2024, the study was limited to students admitted in college from 2020 to 2024 only.

**Table - 1: Year-wise Registered UG Engineering students in R.S.C.E.**

Year	2020-21	2021-22	2022-23	2023-24
No of UG Engg. Students	3655	3697	3667	3665

Distribution of UG Engineering Students Over the Years



**Figure 3: Year-wise Registered UG Engineering students**

**5.3 Sampling, Sample Size. Response Rate:** Simple random sampling was used in this study. Questionnaire was designed in google form and shared the QR Code with 750 UG Engineering students through Telegram media and asked them to fill it. Total 562 questionnaires were received back in online mode only. Hence the response rate is  $563/750=0.750= 75.06$  which can be considered sufficient for data collection.

**5.4 Sample Design:** Sample design is a definite plan for obtaining a sample from given population. The methodology used to select sample users for this study was simple random sampling.

**5.5 Sample Size:** The sample was drawn from JSPM's Rajarshi Shahu College of Engineering Since the population size of the college is large, random sampling technique has been applied. Only Under-Graduate (UG) students of engineering courses are considered for this study. To determine the sample size the Morgan Table was referred. As per the Morgan Table for the population of 4000 the sample size suggested is 351. And researcher collected 563 responses for current study which exceeds the suggested sample size.

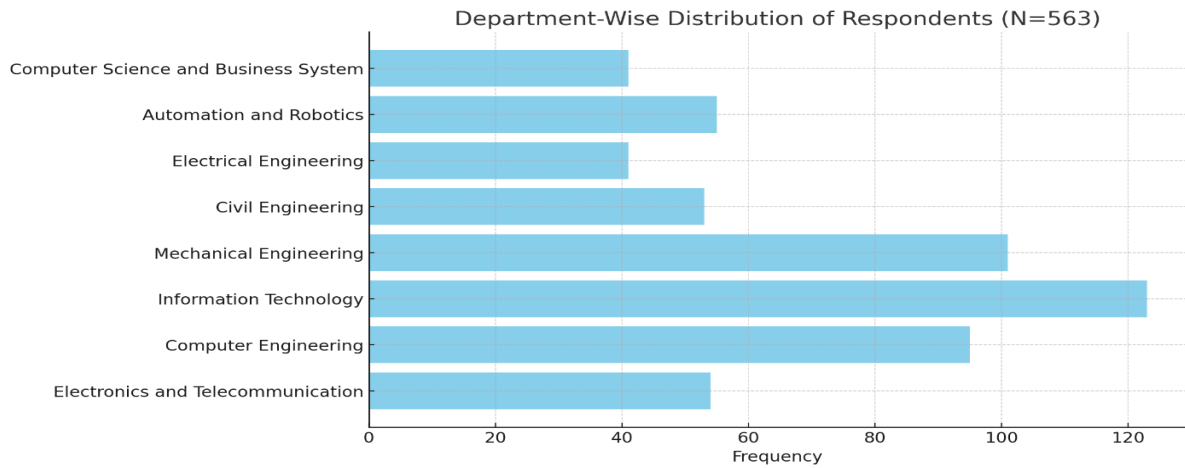
## 6. Data Analysis

### 6.1 Major Observations and Findings of the Study

Distribution of the respondents based on the Departments they are studying: In this study total 563 UG Engineering students have responded to questionnaire. They were classified on the basis of departments of their study. Nearly one fourth i.e. 123 out of 562 respondents are from Information Technology department followed by department of Mechanical Engineering (101 respondents) and Computer Engineering (95 respondents). Almost equal number of respondents are from Electronics and Telecommunication and Civil Engineering Departments (54 and 53 respectively) and (41 respondents) from Electrical Engineering and Computer Science and Business System departments. Department-wise distribution of respondents has been shown in Table 2.

**Table - 2: Department-Wise Distribution of Respondents (N=563)**

<b>Branch</b>	<b>Frequency</b>	<b>Percentage</b>
Electronics and Telecommunication	54	9.59
Computer Engineering	95	16.87
Information Technology	123	21.85
Mechanical Engineering	101	17.94
Civil Engineering	53	9.42
Electrical Engineering	41	7.28
Automation and Robotics	55	9.77
Computer Science and Business System	41	7.28
<b>Total</b>	<b>563</b>	<b>100.0</b>



**Figure 4: Department-Wise Distribution of Respondents**

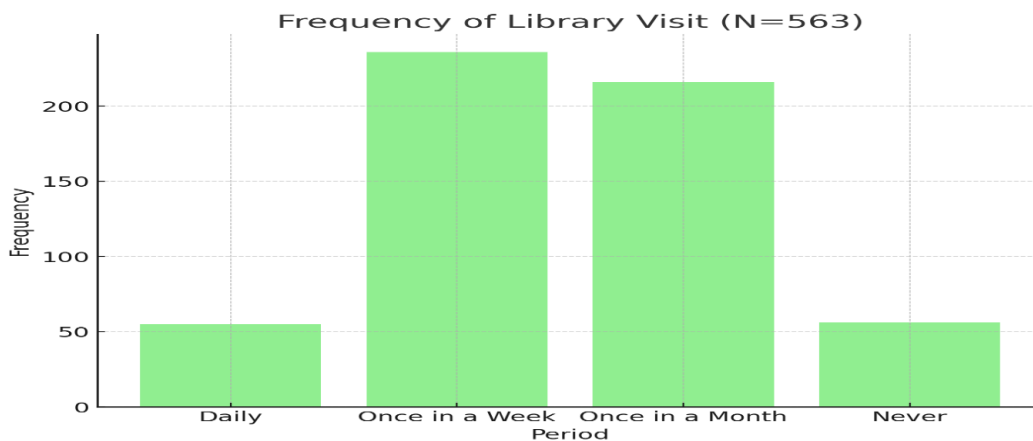
## 6.2 Frequency of Library Visit

To know the frequency of library visit, respondents were asked how frequently they visit library and responses are presented in Table 3.

**Table - 3: Frequency of Library Visit (N=563)**

Period	Frequency	Percentage
Daily	55	9.76
Once in a Week	236	41.92
Once in a Month	216	38.37
Never	56	9.95
<b>Total</b>	<b>563</b>	<b>100.0</b>

The range for frequency of library visit asked as daily, weekly, monthly and also never. The response shows that, 236 (41.92%) of respondents visit their college library once in a week, followed by 216 (38.37%) once in a month. Some 55 (9.76%) state, they visit their college library daily. And equal 56 (9.95%) expressed as they never visit library. Krishna Kumar (2010) found from his study as 30% of the users visit library regularly followed by two to three times in a week as 20%. Prakash and et al. (2014) examine the use of collection, facilities and services of central university libraries of Karnataka state. As for as frequency of visit was concerned maximum users visiting and using library regularly and two to three times in a week.

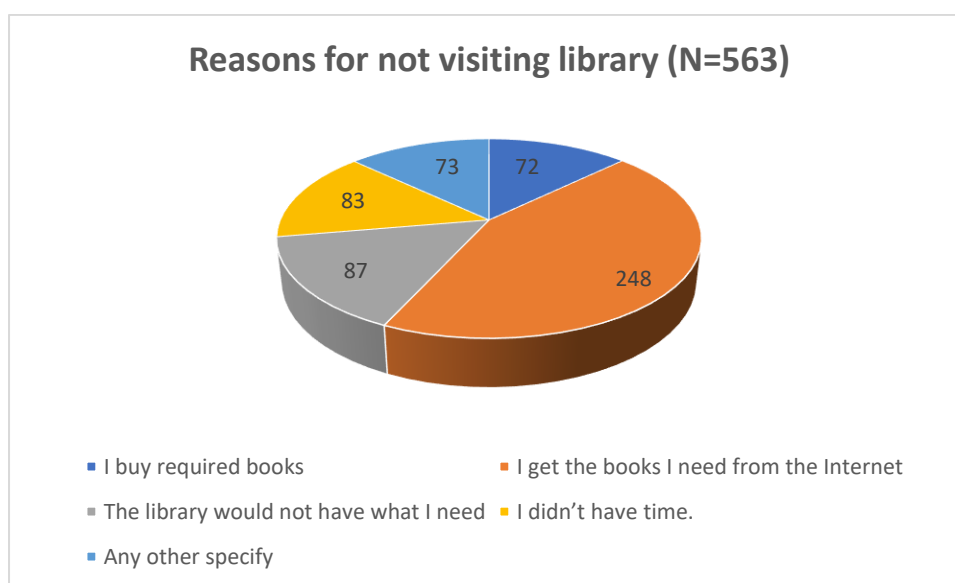


**Figure 5: Frequency of Library Visit**

### 6.3 Reasons for not visiting library

**Table - 4: Reasons for not visiting library (N=563)**

Specified Reason	Frequency	Percentage
I buy required books	72	12.8
I get the books I need from the Internet	248	44.0
The library would not have what I need	87	15.5
I didn't have time.	83	14.7
Any other specify	73	13.0
<b>Total</b>	<b>563</b>	<b>100.0</b>



**Figure 6: Reasons for not visiting library**

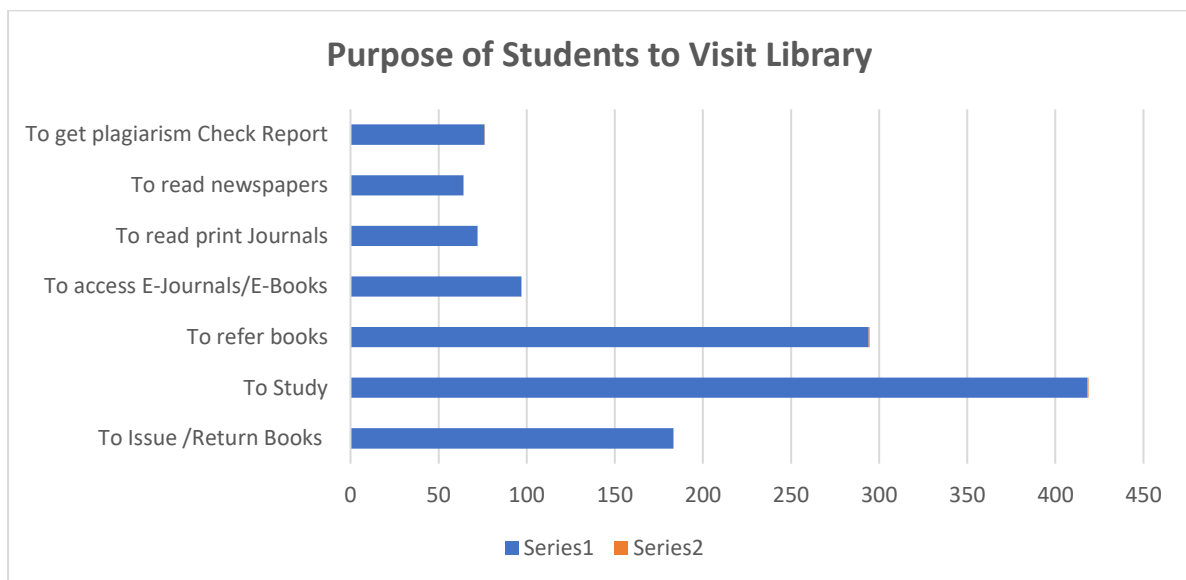
### 6.4 Purpose of Students to Visit Library

This question was asked to know the percentage of respondents for which purpose the students visit library. The obtained data has been presented in Table 5

**Table - 5: Purpose of Students to Visit Library (Multiple Choice Based Question)**

Purpose	Frequency	Percentage
To Issue /Return Books	183	32.5
To Study	418	74.2
To refer books	294	52.2
To access E-Journals/E-Books	97	17.2
To read print Journals	72	12.8
To read newspapers	64	11.4
To get plagiarism Check Report	76	13.5

The above respective question has been made multi choice based by observing the students use resources of different sections of library when they visit. By monitoring Table 5 it is clear that almost three fourth 418 (74.2%) of respondents visit library for the purpose of study followed by more than half (52.2%) visit to refer books and. And one third (32.5%) said they visit library for issue return of books. 17.2% to access E-Journals/E-Books Less than 14% of respondents in the same group visit for ‘To get plagiarism Check Report’, ‘To read print Journals‘ and ‘To read newspapers’.’ Prakash (2013).found in his study ‘Borrowing of books was the main purpose of the students to visit library.



**Figure 7: Purpose of Students to Visit Library**

### 6.5 Awareness of Students about Web OPAC System

In response to the question about prior awareness about Web OPAC system, 57.4% of respondents opined as they were aware about web OPAC and remaining 42.6% said they were not aware about it. (See Table 6). Matonkar and Gauns (2024) depicts from their study as 63.7% of respondents are aware of OPAC. Prakash and et al (2014) examine the use of collection, facilities and services of central university libraries of Karnataka state. Regarding awareness of library services compare to other services users are less aware about OPAC and book reservation service.

**Table - 6: Awareness about Library Web OPAC**

Options	Frequency	Percentage
Yes	323	57.4
No	240	42.6
<b>Total</b>	<b>563</b>	<b>100.0</b>

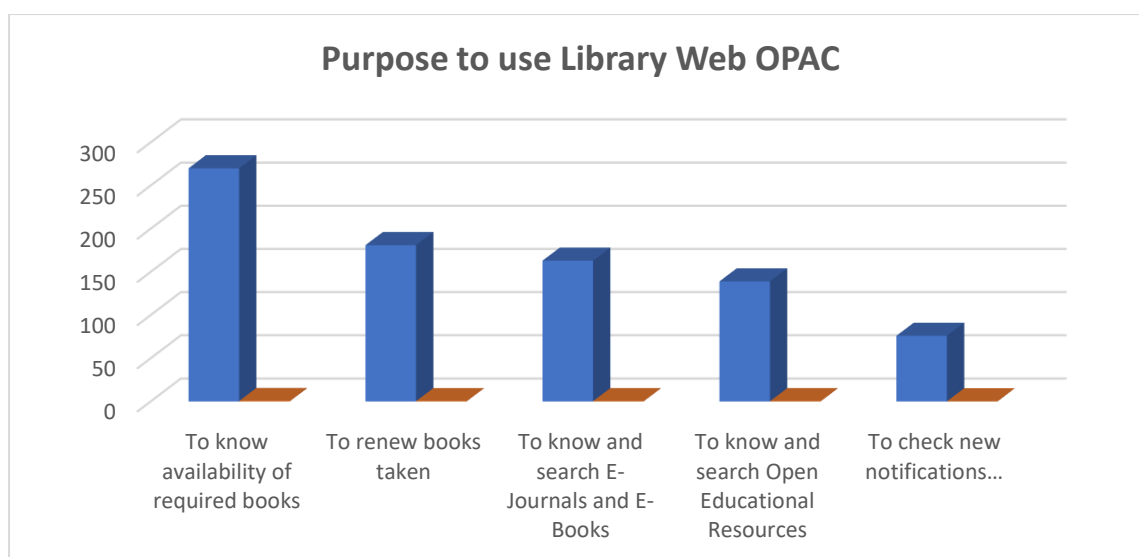
### 6.6 Purpose to Use Web OPAC by UG Engineering Students

This question has been made multi choice based because students use Web OPAC for more than one purpose. The respondents were asked to mark the purposes to use the Web OPAC if they have used it. In response almost half of the respondents (48%) marked the purpose

to know the availability of required books in Library. Nearly one third (32.1%) to renew books taken from them followed by one fourth of respondents said they use web OPAC to access e resources and open educational resources. Few (13.5%) said as to check new notifications of library. (See Table 7). Surwade and et. al (2023) revealed that 41.08 per cent of respondents consulted OPAC to know availability and location of a particular book in the library. Matonkar and Gauns (2024) depicts from their study as 32.5% use OPAC to locate books within the library, while 30.2% use it to ascertain the availability of required books and 10.7% to reserve books.

**Table - 7: Purpose to use Library Web OPAC**

Purpose	Frequency	Percentage
To know availability of required books	270	48.0
To renew books taken	181	32.1
To know and search E-Journals and E-Books	163	29.0
To know and search Open Educational Resources	139	24.7
To check new notifications...	76	13.5



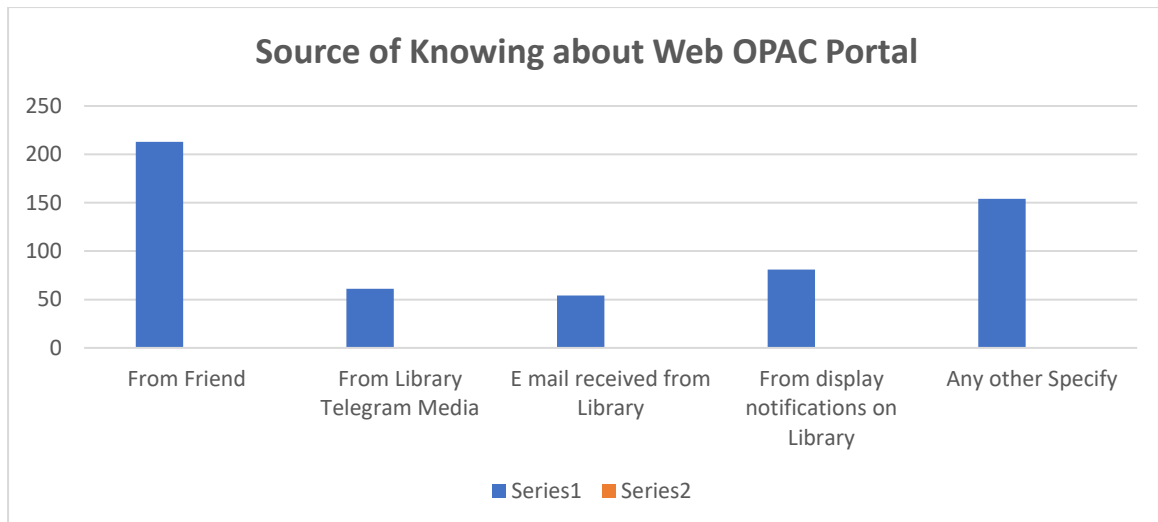
**Figure 8: Source of knowing about Web OPAC by UG Engineering Students**

### 6.7 Source of Knowing Web OPAC Portal

In response to the question about the source from where the students know about Web OPAC. (37.8%) of respondents said they came to know about web OPAC from their friends followed by 14.4% from notifications displayed on library notice board almost 10% from library alerts on social media through telegram group and e mail they received from library. (See Table 8)

**Table - 8: Source of Knowing about Web OPAC Portal:**

Options	Frequency	Percentage
From Friend	213	37.8
From Library Telegram Media	61	10.8
E mail received from Library	54	9.6
From display notifications on Library	81	14.4
Any other Specify	154	27.4



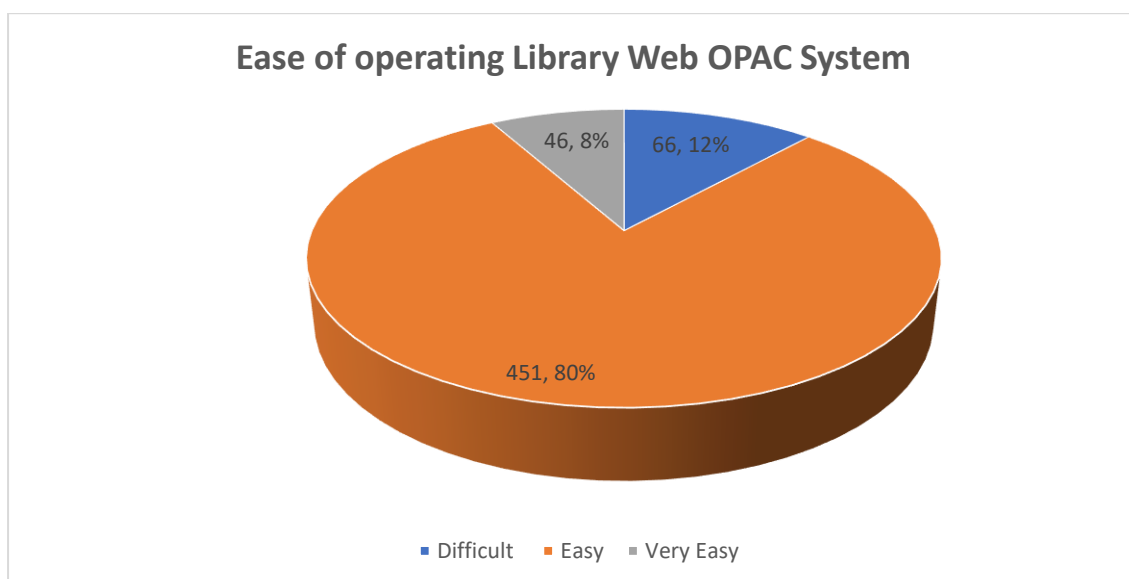
**Figure 9: Source of Knowing about Web OPAC Portal**

### 6.8 Ease of Operating Web OPAC by UG Engineering Students

80.1% of students said that web OPAC portal is easy to operate and 11.7% said it is difficult. 8.2 % of them found as web OPAC portal is very easy to operate. (See Table 9). Kumar (2014) identify that satisfaction with ease of usage of OPAC was higher. Vijayakumar (2019) depicts from his study as majority of 49.41% of respondents found OPAC easy to search the documents.

**Table - 9: Ease of operating Library Web OPAC System**

Response	Frequency	Percentage
Difficult	66	11.7
Easy	451	80.1
Very Easy	46	8.2
<b>Total</b>	<b>563</b>	<b>100.0</b>



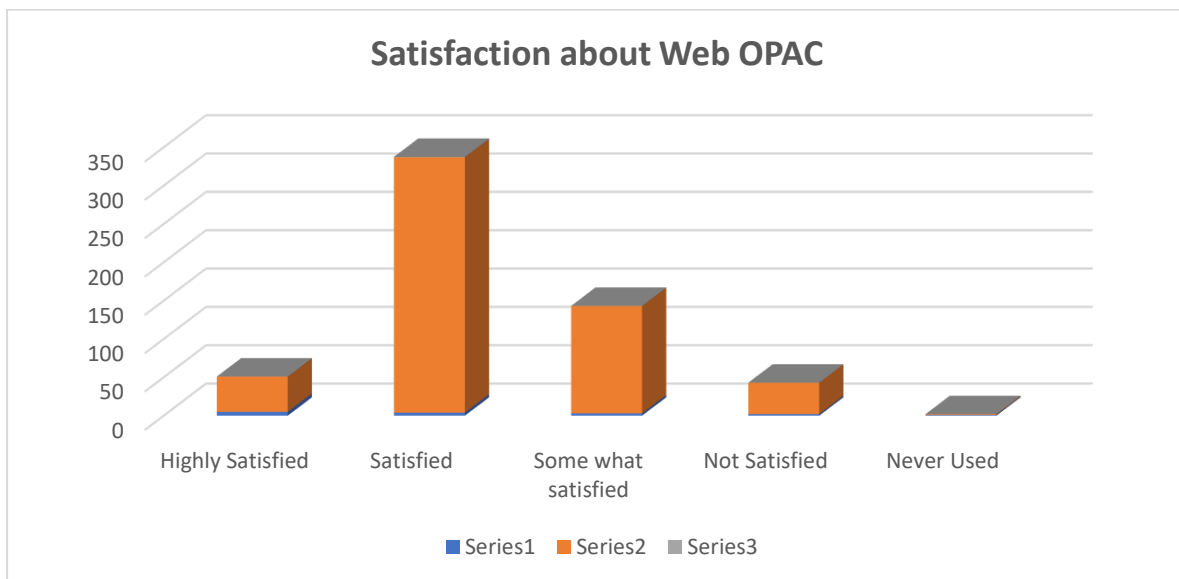
**Figure 10: Ease of operating Library Web OPAC System**

## 6.9 Satisfaction about Web OPAC among UG Engineering Students

Table 10. Satisfaction with Library Web OPAC System: In this question respondents were asked about satisfaction regarding web OPAC portal. They were provided five options in Likert scaling. The number of respondents for each option has been shown in Table 10. Large number of respondents (59.1%) said they are satisfied with Web OPAC portal and one fourth (24.9%) said as they are somewhat satisfied with it. Highly satisfied respondents found as less (8.3%) and (7.5%) as not satisfied with web OPAC portal. Matonkar and Gauns (2024) depicts as 27.8% of respondents are satisfied, while 16.6% are dissatisfied with the OPAC's efficacy in locating books. And 8.3% of respondents reported of being fully satisfied with using OPAC for book searches.

**Table - 10: Satisfaction about Web OPAC among UG Engineering Students**

Response	Scale	Frequency	Percentage
Highly Satisfied	5	47	8.3
Satisfied	4	333	59.1
Some what satisfied	3	140	24.9
Not Satisfied	2	42	7.5
Never Used	1	1	0.2
<b>Total</b>		<b>563</b>	<b>100.0</b>



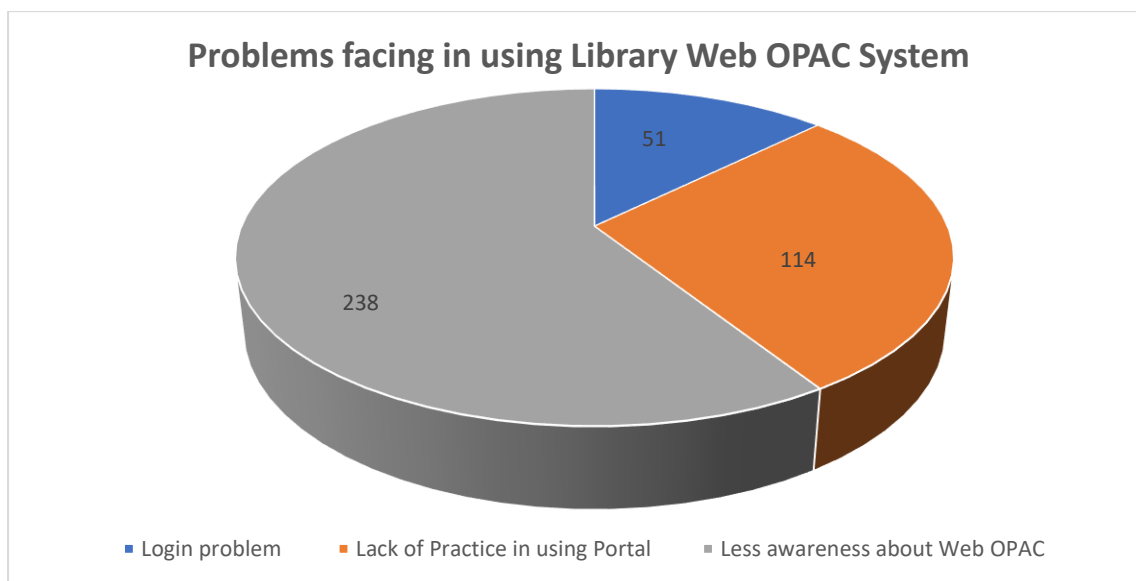
**Figure 11: Satisfaction about Web OPAC**

## 6.10 Problems faced during accessing of Web OPAC by UG Engineering Students

The analysis of Table 11 shows that major 42.3% of the respondents expressed as less awareness about Web OPAC is as the major problem. 20.2% of them said as lack of practice in using it. Further 9.1% expressed about login issue of the Web OPAC portal. Surwade and et al. (2023) revealed 47.08 % of respondents faced Network/Server problems while searching documents on OPAC portal.

**Table - 11: Problems facing in using Library Web OPAC Portal**

Response	Frequency	Percentage
Login problem	51	9.1
Lack of Practice in using Portal	114	20.2
Less awareness about Web OPAC	238	42.3
Any other specify	160	28.4
<b>Total</b>	<b>563</b>	<b>100.0</b>



**Figure 12: Problems facing in using Library Web OPAC System**

## 7. Results

Substantial more than half (57.4%) of UG Engineering students of JSPM's Rajarshi Shahu College of Engineering are found aware of the Web OPAC portal of Jayawant Library. Similarly, almost half (48%) of students uses the Web OPAC portal to know the availability of required books in Jayawant library. More than one third (37.8%) expressed as they explored Web OPAC through their friends and equal 43.8% said they received knowledge about Web OPAC through Social media alerts provided by Jayawant Library staff members. Most (80.1%) of students found Web OPAC portal easy to cooperate. (59.1%) of students satisfied with Web OPAC portal. Less awareness about Web OPAC Portal is the problem for 42.3% of students as they are not using it. As for as library visit is concerned, majority of students visit library once in a week and once in a month (41.9% and 38.4% Respectively).

## 8. Conclusion

The study reveals that, respondents have shown their overall satisfaction with Web OPAC portal. Although 42 % of students visit library once in a week to issue books, almost equal 44% of students said they will get required books on internet and this is the reason for their less visit to library. It is encouraging to note as 74.2% of students visit library for study and 52.2% to refer books. It is also good to note as 57.4% of students said they aware about Web OPAC portal and 48% among them use it to know availability of books in library and 32.1% to renew

their borrowed books online still considerable. It is concerned matter as 42.6% of students are not aware about library web OPAC portal. It is good to know that, 38.8 % of students said they know about WEB OPAC portal from different social media platform used by library to inform about library updates and from QR Codes for different library resources and also displayed on library notice board. And almost equal 37.8% of students said they came to know about web OPAC from their friends and teachers. As again library manage to create HOD and Library Coordinators WhatsApp group and Telegram group for students for informing about library updates including Web OPAC portal on it. It indicates that, library is taking good efforts to reach students for its resources through different social media platforms. A review of open-ended opinions indicates that users have highlighted different problems for which library need attention and resolve the same so that students can utilize the library resources more and more.

## References

1. Ponnudurai, R., & Saravanan, T. (2017). Awareness on OPAC by the Undergraduate Students: A Study. *Journal of Advances in Library and Information Science*, 6(4), 314-316.
2. Veena, G. & et al. (2015). Use and Awareness of Online Public Access Catalogue (OPAC) facility by users of SVS College Library, Bantwala Mangalore: A study. *International Journal of Library and Information Studies*, 54(4), 65-71.
3. Prakash. M. & et al. (2013). Awareness and use pattern of information sources and services in MAHER(Meenakshi Academy of higher Education and Research) deemed university. *e-library Science Research Journal* , 2(2), 1-7.
4. Prakash. & et al. (2014). Library collection, facilities and services of the central universities of Karnatak:A Survey. *Journal of Library and Information Science* , 4(1), 170-181.
5. Mallaiah, L. F. (2014). Use of information resources in engineering college libraries of Dakshina Kannada and Udupi districts:A Comparative Study. *Annals of Library and Information Studies* , 6(1), 142-152.
6. Vijayakumar, K., & R. Mohana Devi (2019). A Study on the use of online Public Access Catalogue at the Library of Annamalai University; Tamil Nadu, *Journal of Emerging Technologies and Innovative Research*, 6(7), 160-164.
7. Surwade, Y.P. & et al. (2023). Access of Online Public Access Catalogue (OPAC) Services by the PG Students of J.S.S.P. College, Goveli: A Study. Book Chapter -59 under the Title: *Transforming Libraries in 21st 528 | Century 527-537*.
8. Rajarshi Shahu College of Engineering. (2024). *About Library: Rajarshi Shahu College of Engineering*; Retrieved March 6, 2024, 3:44 IST,from Rajarshi Shahu College of Engineering: <https://www.jspmrscoe.edu.in/library/aboutlibrary-home>

