

Assessment of Awareness, Usage Patterns, Effectiveness, and User Satisfaction of OPAC among Undergraduate Students of Tirhut College of Agriculture, Dholi

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Abstract:

The present paper aims to study the awareness, use, effectiveness and satisfaction of OPAC by undergraduate students of Tirhut College of Agriculture, Dholi, a constituent of Dr. Rajendra Prasad Central Agricultural University, Bihar. Out of a total of 170 structured questionnaires, 140 were filled correctly and included for further analysis. It was found that 70.71% of the students who are aware of OPAC, access it frequently and usually to find out the availability and number of copies of documents. Search behavior demonstrates over-reliance on simple queries (author/title) and under-use of other, more advanced features like putting a hold request or renewing a book. Some key challenges included difficulties with ambiguous searches, lack of spelling correction, and problems with the system not working at times. Satisfaction with OPAC is average, 46.43% are satisfied and 34.28% are neutral. Performance and utilization of OPACs were found to be impacted by multiple factors, indicating that users would benefit from improved training, interfaces, and library support in order to make the most of OPACs at agricultural universities.

Keywords: OPAC usage; User satisfaction; Search pattern; Library automation; Information retrieval; Agricultural library; Academic library; Tirhut College of Agriculture

Introduction:

Libraries are adopting technology to streamline and expedite their processes. Koha, a free and open-source library management system, is one of the most widely used of these. It is useful for maintaining the book inventory, book checkout and check-in, periodicals, and searching for books online via OPAC (Online Public Access Catalogue). Koha has been adopted by many libraries around the world. But few know how to use all of its features properly. Some library staff and users are unaware of Koha's capabilities. Perhaps due to lack of training, technical knowledge, or support. We must also be aware of the level of understanding and use of Koha among users. It assists libraries in enhancing services and utilizing the system more efficiently. The study examines the awareness level of Koha and its application in day to day functioning of libraries.

Tirhut College of Agriculture, Dholi, Muzaffarpur, Bihar, is one of the oldest agricultural colleges in eastern India. It is a constituent unit of Dr. Rajendra Prasad Central Agricultural University, Pusa. TCA offers undergraduate programs in agriculture and related fields. To enhance access to information and

library services, the college library has adopted Koha, an open-source Integrated Library Management System (ILMS). Koha assists with library automation in the areas of services such as cataloguing, circulation, acquisition, and online public access catalogue (OPAC). Using Koha, the process of searching for books and other materials in the TCA is now more efficient, easier to do, and saves time for students, staff and researchers.

The present study examines the awareness and use of OPAC among the undergraduate students of Tirhut College of Agriculture (TCA), Dholi. It examines their frequency of searching the OPAC for books, journals, theses, and other library resources and their knowledge of OPAC features. It also emphasizes familiar problems for users in terms of limited technical skills, internet access, training and issues with the interface. Collecting their feedback would aim to propose an easy and useful design for OPAC in order to make it accessible for as many people as possible. The ultimate goal of this study is to help improve the overall access to and usability of TCA's library for teaching and research purposes.

Statement of the Problem:

The Online Public Access Catalogue (OPAC) has become an entry point for access to library materials in the digital age. Nonetheless, its use is still limited, particularly among the undergraduate students. There is OPAC facility in the Tirhut College of Agriculture, Dholi but the involvement of students seems to be nominal and they hardly use the advanced features. Issues with search strategies, lack of training on the system, and usability problems could prevent them from being used optimally. The purpose of this study is to understand the awareness, use, effectiveness, and satisfaction of OPAC among undergraduate students in order to identify concerns that could lead to improvement of OPAC's utility and relevance.

Review of Related Literature:

Makinde and Akinola (2025) studied the impact of ICT skills and information literacy skills on OPAC usage by law undergraduates in Nigeria. Data was analyzed using Pearson Product Moment Correlation as well as multiple linear regressions, and a sample of 286 participants who were collected through a two-stage sampling survey design. Their results indicated ICT skills were the most predictive of OPAC use, with information literacy skills having a somewhat lesser effect. Interestingly only two of the ICT skills indicators, information processing and collaboration, had a significant effect on the use of OPACs. The implications of these findings point to a need for technical skills involved in using the library catalog. The authors suggest that intensive ICT training programs be set up and that practical aspects be integrated into the curriculum in order to reinforce ICT and information literacy skills of law students.

Rout and Panigrahi (2018) surveyed the use of OPAC by library users in higher educational institutions of Odisha. The study reported that overall OPAC use was low, based on 380 valid questionnaires. Though users searched by title and author, overall success in finding documents was only moderate. Primary concerns were OPAC feature unawareness, query formation challenges, search failures, lack of spelling correction/feedback, insufficient or confusing instructions, and insufficient help from staff. The study highlights the necessity of a better functioning OPAC and assistance for an even better use of it.

Kumar and Singh (2017) conducted a study on the use of OPAC at the university library of Guru Gobind Singh Indraprastha University, Delhi, with a sample size of 182 respondents comprised of postgraduate students, research scholars, and teaching faculty. It concluded that 39.1% of the users accessed OPAC on a daily basis and primarily look for bibliographic information by searching under author and title.

Though about 54.4% of users expressed being completely satisfied with the OPAC system, other users mentioned that they faced problems such as low OPAC awareness, OPAC working stations in non convenient locations , and a lack of personnel support at OPAC working stations

Swaminathan (2017) carried out a survey on the use of OPAC at the library of Anna University Regional Campus, Coimbatore. A total of 154 valid questionnaires were obtained from the 190 distributed. Users generally used OPAC to search for library materials but many of them experienced difficulties in doing so .The paper suggests conducting quality training sessions to better prepare users in the knowledge of using OPAC effectively.

Ahmed (2014) conducted research and examined on awareness of library software, comparing OPAC and card catalogues amongst the users of IIT Delhi, IIT Kanpur and the University of Kashmir. A questionnaire survey was conducted to compare the characteristics of LibSys and Virtua software. It was found that OPAC usage is higher in IITs but lower in Kashmir University, although RFID technology has been successfully implemented with Virtua at Kashmir University. Even though they have implemented OPAC, card catalogues still exist in all three institutions, but they are hardly ever consulted. The implications of the findings emphasize the importance of improving OPACs, as well as suggesting ways for libraries to select the most suitable library management software.

Gohain and Saikia (2013) studied the use and satisfaction of OPAC services among the B.Tech. students of Tezpur University. It examined frequency of use, purpose of utilization, knowledge of use, and challenges to use. The findings indicate that more than 70% of the respondents know the features of the search documents, and 51.03% accessed the OPAC on a daily basis. But, among the users, there were problems like OPAC skills, awareness, as well as guidance. But, despite these difficulties, the overall satisfaction with the OPAC services was high, suggesting a positive overall user experience.

Onuoha, Umahi, and Bamidele (2013) studied the use of OPAC by final year students of Redeemer's University and University of Agriculture, Abeokuta, Nigeria. Through the use of a descriptive survey and stratified random sampling, it was found that there was low use of OPACs, and users reported being moderately satisfied with them. Some challenges found, i.e. no orientation, few computers and intermittent electricity. They suggested that improved training of students, increased availability of computers, as well as reliable alternatives to power supply would improve use of OPACS in their study of university libraries.

Yusuf (2012) carried out a study on the use of OPAC by library users in some selected tertiary institutions within Lagos State. From a total of 420 valid responses, they explored the awareness of, purpose for, and frequency of use of, as well as challenges faced by the patrons. The results indicated a low level of usage of OPACs and moderate success in locating materials. Some difficulties experienced by users included poorly structured queries, no spelling correction, insufficient instructions, and minimal staff support. The study concluded that something needed to be done to enhance the effective use of the OPAC, especially in terms of training users.

Thanuskodi (2012) studied the use of OPAC by faculty, research scholars and postgraduate students of various disciplines in Annamalai University. The survey that used a questionnaire found that less than a third of the respondents reported using the OPAC often. Users predominantly used the OPAC to find out whether documents were available and where they were located. This study revealed less use and indicated that there is a need to increase awareness and training in order to effectively make use of OPAC services in the university library.

Kumar and Vohra (2011) explored the utilization of OPAC among the students and faculties of the Panjab University Library at Chandigarh. This survey utilized questionnaires distributed to different user communities in multiple disciplines, examining points such as frequency of use, purpose of use, ease of use, and satisfaction. In this respect, most users used OPAC for getting access to materials, but advanced search features weren't frequently employed because users weren't trained to apply this feature. They suggested that users should undergo training courses in order to improve skills and efficiency in using the OPAC through the university library.

Objectives of the Study:

- To determine the frequency of library visit for the utilization of OPAC
- To find out the satisfaction level of the users regarding the Koha OPAC functionalities.
- To determine what are the main purposes for users to access and use Koha OPAC.
- To identify the ideal and commonly utilized search accesses (i.e. title, author, subject etc) of Koha OPAC.
- To measure the user satisfaction of the Koha OPAC experience.
- To find out the issues that are faced by the users and have their feedback in improving Koha OPAC services for a better user experience.

Scope of the Study:

The present study concentrates on the knowledge, utilization and satisfaction of OPAC system among the UG students of Tirhut College of Agriculture, Dholi. This research is limited only to the OPAC services of college library and no other library tools or databases digitals. The data was collected through a structured questionnaire and the results presented here reflect information obtained exclusively from undergraduate students, and do not include responses from faculty, researchers, or post-graduate users. The findings are intended to contribute towards a more user-centered and effective Online Public Access Catalog (OPAC) service in a specifically agricultural academic environment.

Analysis and Discussion of Data:

Table 1: Gender-Based Response

Category of users	Frequency of Respondent	Percentage
Male	88	62.86
Female	52	37.14
Total	140	100

The response of participants by gender is shown in Table 1. Of the total of 140 respondents, 88 were males and represented 62.86% of the sample and 52 were females and represented 37.14%. This shows that the sample of participants in the survey is over-representative of male users than female users.

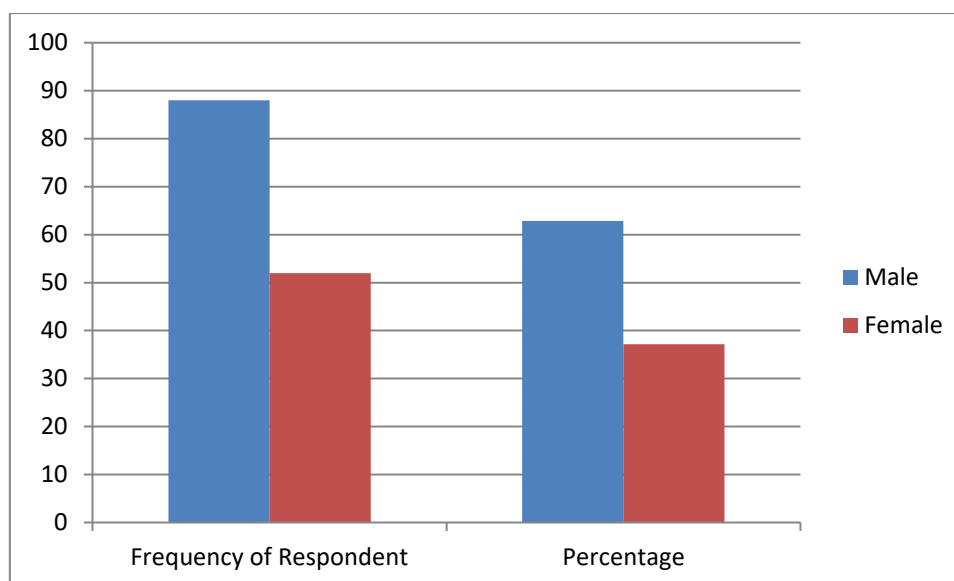


Figure 1: Gender Wise Response Pattern

Table 2: Awareness about OPAC System

Utilization	Frequency of Patrons	Percentage (%)
Yes	99	70.71
No	41	29.29
Total	140	100

Table 2 indicates the level of OPAC awareness among users. Among the total respondents of 140, 99 patrons which is 70.71% were aware of OPAC system, but, 41 patrons which is 29.29% were not aware of it. This indicates that most of the users are oriented on the use of OPAC, but large number of them remains unacquainted, thus there has to be some efforts to spread awareness to the use of OPAC in the library.

Table 3: Frequency of Library Visit to use OPAC

Frequency	No. of Respondents	Percentage (%)
Daily	60	42.86
Twice in a Week	32	22.86
Weekly	24	17.14
Occasionally	17	12.14
Rarely	7	5
Total	140	100

Table 3 presents how often the respondents visit the library based on their usage of the OPAC system. Of the total of 140 respondents, maximum response of 60 (42.86%) uses OPAC on daily basis which suggests frequent usage of library system. The next highest number, 32 respondents (22.86%) use it 2 times per week, while 24 respondents (17.14%) access it on a weekly basis. There are 17 users (12.14%) who occasionally use OPAC and 7 users (5%) who report rarely using it. It indicates a clear tendency of regular and frequent use of the OPAC by most users, but also a proportion of users who make less and

occasional use of it, which also could be a sign of a lack of motivation, or perhaps accessibility of the OPAC.

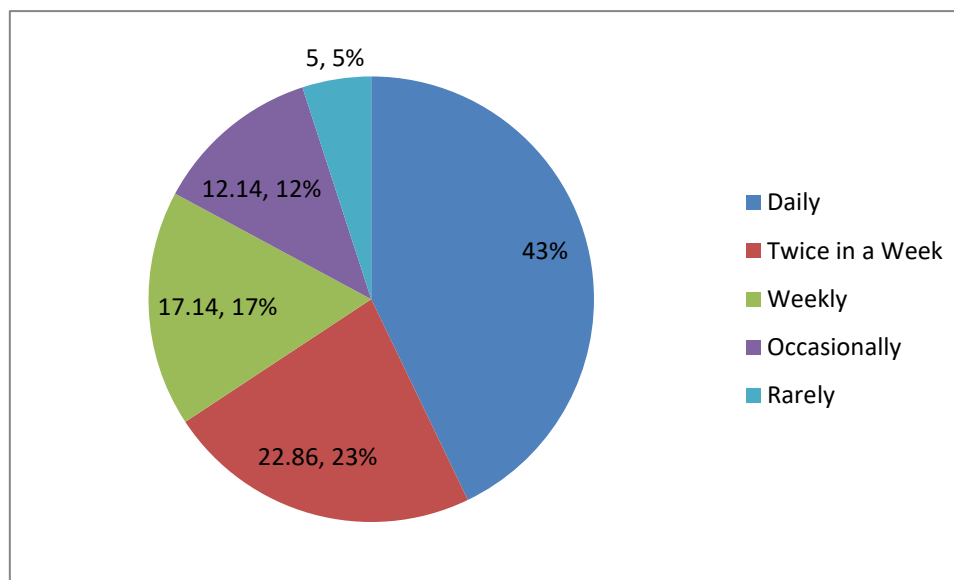


Figure 2: Frequency of OPAC usage by Patrons

Table 4: Purpose of using OPAC

Purpose	Survey Responses	In percentage (%)
To check the availability of document(s)	46	32.86
To find the bibliographical details	37	26.43
To check the no. of copies available	45	32.14
To place a hold or reservation	12	8.57
To renew the issued book(s)	00	00
Total	140	100

The use of OPAC system by its users for different purposes is shown in table 4. The largest frequency is for checking document availability, which was mentioned by 46 respondents (32.86%) and the highest next frequency was for checking number of copies available with 45 respondents (32.14%). Also, 37 users (26.43%) search bibliographical details of documents in the OPAC. 12 respondents use it to place a hold or reservation accounting for 8.57%. Interestingly, none of the respondents mentioned renewing books borrowed through OPAC. This implies that OPAC is mainly utilized for search purposes and to confirm that a document exists and is available, while other more sophisticated functions such as placing holds and renewing books are either not used or not accessible, which is something that could be improved as a service or taught to users.

Table 5: Search Pattern in utilization of OPAC

Search Pattern	Response by Patrons	% (Percent)
By Author Name	60	42.86
By Title	45	32.14

By Subject	31	22.14
By Call No.	4	2.86
Total	140	100

Table 5 describes the types of searches users perform in the OPAC system. Author name searching is the most used method, preferred by 60 users representing 42.86%. Next are 45 respondents (32.14%) who search by title, and 31 respondents (22.14%) who rely on searches by subject. Just 4 of the respondents, or 2.86%, search by call number. It appears that users prefer more simple search type options, such as author and title searches, while another search techniques are rarely used possibly due to lack of awareness or familiarity.

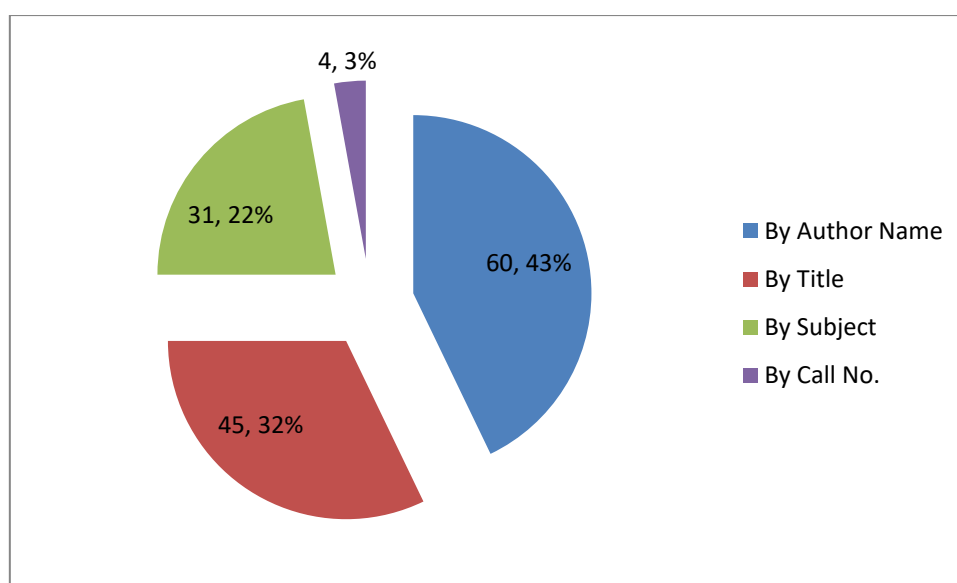


Figure 3: Search Pattern for OPAC Utilization

Table 6: Effectiveness of OPAC for Locating Required Information

Effectiveness	Respondents	% (Percent)
Always	42	30
Most of Times	60	42.86
Occasionally	22	15.71
Not at All	16	11.43
Total	140	100

Table 6 shows OPAC's user perceptions on how well it helps them find what they are looking for. Of the 140 respondents, 60 (42.86%) said that OPAC is effective most of the time and 42 respondents (30%) said it is always effective. This shows that OPAC is seen as a useful tool among most users. But, 22 users (15.71%) reported that it works sometimes and 16 users (11.43%) reported that it is not effective. The fact that there are still a considerable number of responses indicating that OPAC works for "most of the time" or "not often" for them also indicates there is room for improvement in terms of usability of the system or assistance to the user.

Table 7: Problems faced by patrons while accessing OPAC

Problems faced by patron	No. of Respondents	% (Percent)
OPAC System Malfunctioning	26	18.57
Ambiguity in Framing Search Query	41	29.28
Slow Search Response Time	17	12.14
Insufficient User Instruction for OPAC Usage	11	7.85
No Option for Spelling Correction	38	27.14
Lack of assistance or guide by Library Staff	7	5
Total	140	100

The major issues users experience when using OPAC are listed in Table 7. Among the categories of problems, ambiguous frame of search queries was the most dominant one with 29.28%, while absence of spelling correction options tasks had the second position in problems occurrence with 27.14%. Also, system not working (18.57%), searches not quickly enough (12.14%), poor instructions for users (7.85%), no help from staff (5%). These results point to a requirement to make the system more usable, include more direction, and better support for the user.

Table 8: Overall satisfaction on utilization of OPAC

Satisfaction Level	Response by Patrons	% (Percent)
Completely Satisfied	14	10
Satisfied	65	46.43
Neither Satisfied nor Dissatisfied	48	34.28
Not Satisfied	13	9.29
Total	140	100

Table 8 illustrates the degree of satisfaction among patrons in regard to the use of OPAC system. Of them, 65 users (46.43%) were satisfied and 14 users (10%) very satisfied. There were 48 (34.28%), who were neutral, meaning they neither satisfied nor dissatisfied. A lower number, 13 (9.29%) felt not satisfied. Overall, this indicates that OPAC is positively viewed by most users but, there is still room for improvement in order to increase satisfaction, and decrease neutrality or dissatisfaction, amongst users.

Research Design and Methods:

A descriptive survey research design was used to access OPAC awareness, usage patterns, effectiveness, and user satisfaction among undergraduate students of Tirhut College of Agriculture, Dholi, Dr. Rajendra Prasad Central Agricultural University, Bihar. Data was collected using a structured questionnaire consisting of five sections; demographics, awareness, usage behavior, system effectiveness, and user satisfaction. One hundred and forty questionnaires were returned out of 170 distributed, for a total response rate of 82.35%. A descriptive statistical analysis was performed in order to understand main general trends and insights from the users.

Major Findings of the Study:

The findings show that among participants in their survey, the vast majority were male at 62.86 percent, indicating highest participation of male users in the study.

Awareness for the OPAC system was seen in a majority of users (70.71%) indicating that awareness has been widely spread but at the same time nearly 30% were also unaware of it indicating the need for spreading the awareness even further.

The regular use of OPAC, with 42.86% of the respondents indicating they use it daily and 22.86% using it twice a week showed that they actively engage in the system.

The main objectives in using OPAC were to know the availability of a document (32.86%) and the number of copies (32.14%). Interestingly, none of the users mentioned using the OPAC feature to renew checked-out books, which seems to indicate lack of use of this function.

The majority of users searching OPAC opted to do so using the author's name (42.86%) or the title (32.14%), with only a small percentage using subject (22.14%) or call number (2.86%), suggesting a preference for more elementary search methods.

OPAC also appeared to be satisfactory for most users, 42.86% of the respondents said that it worked most of the time and 30% that it always helped them find information. 27.14%, but, reported occasional efficacy or no efficacy.

Among them unclear queries, missed spell correction, and system not working properly were the most common problems with respectively 29.28%, 27.14%, and 18.57%. This implies the existence of issues related to usability and system performance that should be solved.

46.43% were satisfied and 10% completely satisfied, a significant proportion had neutral experience (34.28%) and a smaller percentage (9.29%) was unsatisfied.

Key Conclusions and Proposed Recommendations:

The present study will be useful to understand the status of OPAC usage among the undergraduate students of Tirhut College of Agriculture, Dholi. Most users reported regular knowledge and use of it, mainly for checking availability of documents. More advanced functions like renewals and hold requests were less frequently used. Author and title searches comprised the majority of their search behavior, while subject or call number searches were rarely attempted. Though OPAC worked fairly well for simple searches, users experienced difficulty in formulating queries, spelling correction was not provided, and there were some system down-times. Moderate satisfaction in some areas also indicates a need for training, improving interfaces, or more library support. Such interventions should be decisive to make OPAC a meaningful and accessible academic resource in agricultural education.

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