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AN INVESTIGATION AND ANALYSIS OF ONLINE PUBLIC ACCESS CATALOGUES (OPACS) IN UNIVERSITY LIBRARIES IN SRI LANKA

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Abstract. This study aimed to investigate the usage, user satisfaction and native problems of OPACs in Sri Lankan university libraries. Primary data was collected from 570 users comprising faculty members and students of the six universities. A questionnaire, online survey and participatory observation were used as the data collection tools to obtain information about the OPAC. The data thus collected was analyzed with the help of basic statistical measures to present finding in percentages and ranking formats. Primary data revealed that OPAC has to be developed much more than the stages in which it was introduced to the Sri Lankan university system in 2000. Further, facilities provided with the system were insufficient and majority of users unaware about them. In addition to that, it demonstrated OPACs possessed in primary stages this situation caused to dissatisfaction with users and staff members. Appropriate and continues training for users and staff members, technological advancement and the native language searching facilities can overcome the identified problems. This is a pioneering work in Sri Lanka studying the quality and problems of the OPACs. Since some libraries in Sri Lanka are going for the OPACs, this study could influence to policy and decision makers to implement effective OPACs in Sri Lanka. Keeping in perspective the approach of skillful users and their user behavior, this research suggests recommendation for user-friendly OPACs included simplistic search strategies for university libraries in Sri Lanka.

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INTRODUCTION

OPAC is essential information retrieval tools of the library. It not only offers simplified access to library holdings for users but also enable librarians to add an extra value for their catalogue data (Harmsen, 2000). Current technological advancement has uplifted the quality of the system to fulfill the information requirements of skillful information seekers.

There are various kinds of libraries in Sri Lanka those could be broken down by types and by numbers as follows; national (1), special(162), university(15), public(928) and school(5449) (National library and documentation services board,2006). Early 2000s saw the introduction to OPAC to libraries mostly in university and special libraries. Public and school libraries still function in a traditional way and the introduction of OPAC remains far off from the university and special libraries. Our study involved six OPACs among 15 university libraries in Sri Lanka. These OPACs were at the functioning level at the time of study was conducted.

LITERATURE REVIEW

From the introduction of the OPACs, a large number of studies have been undertaken in various aspects on the topic in the world.

Some study focused on usage, user behavior and satisfaction while others investigated problems related to the OPAC. This literature review attempts to review closely related literature in the field, identify and analyze the present situation and problems related to OPACs in Sri Lanka.

Alexander and Gyeszly (1991) pointed out that in the university library OPAC was an important component for a user's research requirements. Most researches were focused on students as OPAC users neglecting other population of university libraries (Villen-Rueda, Senso & Moya-Anegon, 2007). Some other researches had classified OPAC users as adult users and young users (Chen, 1991). The majority of OPAC users were adults in the universities (Watson, Williamson & White, 1986) while Markey (1984) studied about young OPAC users in public libraries. In any types of user categories, there were significant differences between OPAC usage patterns and demographic characteristics of user categories and age groups (Kumar, 2012). Further, he noted that majority of OPAC users was females (61.3 per cent). Even though, OPAC is an important tool for the libraries, majority of users were not used it for fulfill their bibliographical information needs. Arshad and Shafique (2014) described majority of respondents in Punjab university library preferred the card catalogue (53.3 per cent) than the OPAC (21.7 per cent). Jordan (1998) revealed that students faced difficulties in using

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OPAC in academic libraries. His study revealed that 70 per cent of library users disliked library catalogues. They felt inconvenient about the usage of card and computer catalogues in the library. Nevertheless, Ansari and Amitha (2008) found that majority of respondents browsed OPAC (56 per cent) than card catalogue (22 per cent). Furthermore, Kumar and Vohra (2013) found that one-fifth of the users were unsatisfied with the OPACs in university libraries in the Punjab region in India.

Certain problems relating to OPACs have been identified with researchers who have studied the topic extensively. Borgman (1986), Bates (1989), and Peters (1991) noted that OPAC was not a user-friendly tool. They stated that users had difficulty in performing subject searches for both selecting terms and excluding search. Peters (1991) identified the main causes of problems that derived from the use of OPAC searches such as: user's behavior problem, conceptual and attitude problem, system problems and other problems not specified under the above classes. Lombardo and Condic (2000) technological fears also affected the success of OPAC searches. They noted in their survey that some OPAC users fear or remain at least uncomfortable with computers and many respondents were not familiar with the internet technology. Kumar and Vohra (2013) in their research on user preparation and OPAC pointed out that 76.8 per cent of users not using OPAC were due to "lack of knowledge", "complicated/confusing the use" and "lack of on-screen help". Further, Kumar (2012) found that there was lack of understanding of the inner workings of the OPAC and majority of respondents (80 per cent) were unaware and non-OPAC users as well. Novotny (2004) also described the fact that users expect the library catalogue to function as a search engine, where one could type the words with a search box and get results.

Further, Vidanaparhirana (1995) discussed the features and issues on OPAC in university libraries of Sri Lanka. He identified that there were some issues on OPACs such as lack of computer literacy, inadequate knowledge on database component and users' negative attitude towards OPACs. Dickson (1984) found that users failed 60 per cent of title searchers and 49 per cent of author searchers due to their own errors. The failure of title searches was attributed to the use of initial articles in title, spelling and typographical errors, incorrect Boolean search attempts, and inaccurate abbreviations. As for author searchers, common search error resulted from the wrong order for names, inaccurate surnames or middle initials, or failed Boolean search. Morupisi and Mooko (2006) described typographical errors and spelling difficulties, inappropriate search terms, and search strategies were the common problems faced by users while searching information on the OPAC. Ortiz-Repiso (2006) pointed out users was confronted by traditional problems of information searchings' such as information overloads, error in subject searching and predominantly in the use of the system's complex options. Antell and Huang (2008) pointed out that users rarely utilized correct and complete subject terms and obtained zero results in virtually

half of their searches.

Marcos (2004) had done a study on subject access to users. The chosen sample included twenty catalogues of libraries in Spain and Latin America which adopt different systems. The study pointed out that most users pursued their searching with the aid of main key words; subject, author and title. Harvey and Hinder (2004) explained that the OPAC is used mostly for known item searches or for subject searches.

Presently, people in higher educational systems in Sri Lanka use the internet to find information on educational purposes. Some studies proved that university community searched materials on the web to support academic activities (Punchihewa, Kumara & Kiriella, 2013; Wanigasooriya, 2008; Seneviratne & Amaraweera, 2002; Vidanaparhirana, 1995). Above studies noted that OPACs in Sri Lankan university libraries was still at the developing stage. On the other hand, facilities provided with this system were not enough and complicated to use. Since, library users in Sri Lanka were still in the process of adopting this form of catalogue they did not have clear idea about the difference between OPAC and World Wide Web. Therefore, sound research on the field indeed important for solving the current problems related to OPACs in Sri Lanka. This study basically attempted to identify and analysis present situation and problems related to OPACs for filled the above mentioned research gap. By analyzing the problems, the university libraries will be able to overcome identified problems and could be able to enhance the quality of OPACs in the university libraries. Since some universities in Sri Lanka are planning to establish OPACs in their libraries, this study is a valuable reference to policy makers and decision makers to implement effective OPACs in Sri Lanka. It is anticipated that this study will provide useful information on ensuring the efficient functioning of OPACs in libraries in Sri Lanka.

METHODOLOGY

Six OPACs were selected using non-probability purposive sampling technique as follows: University of Peradeniya OPAC (U1), University of Colombo OPAC (U2), University of Sri Jayawardhanapura OPAC (U3), University of Moratuwa OPAC (U4), University of Ruhuna OPAC (U5) and Open University of Sri Lanka OPAC (U6). A sample of users was taken using stratified random sampling technique, the representation of users in the study remained on a ratio of 3:1.

Several research methods have been used for this study as follows: participatory observations, the distribution of questionnaires, interviews and online survey. A questionnaire was prepared and piloted for use as a tool for data collection to gather primary data through research conducted among the students and the faculty members at six university library OPACs in Sri Lanka. Interviews and participatory observation methods also utilized. The questionnaire was pre-tested on the 20 OPAC users in university of Colombo library (U2). On the feedback from the pilot test, a few corrections of the questionnaire were made. Users

were asked 20 questions altogether which covered 11 themes: (i) OPAC usage; (ii) information seeking behavior of the users; (iii) frequency of using the access points; (iv) search methods; (v) search strategies; (vi) search limits provided with OPACs; (vii) user friendliness; (viii) use of online or printed help materials; (ix) users idea about OPAC interface; (x) user problems; (xi) user's expectation from OPAC. Apart from three questions others were closed ended and users could easily mark their opinion on the answers provided. Inquiries were completed before the distribution of questionnaires among the participants in order to ensure the equal consignment of different characteristics in the sample of faculties of the users, their residence, and their professional levels in the faculty. Out of 570 distributed, 493 were returned; overall response rate is 86.49 per cent.

Online survey was conducted during several times of the days and weeks to investigate (i) available catalogue formats; (ii) software packages used; (iii) modules available; (iv) everyday

accessibility; (v) facilities provided with OPAC; (vi) limitations of OPAC; (vii) nature of interface; (viii) searching options; (ix) searching strategies; (x) relevant links for further information.

Data collected during the research and online survey were coded and presented using basic statistical measures such as: tables, pie charts, bar charts. The findings were presented in percentages and ranking formats.

ANALYSIS AND DISCUSSION

Responses Received

Table 1 depicts the responses received. While 450 questionnaires were distributed among the students, 90 per cent responded while 73.33 per cent returned the questionnaires from the faculty members among 120 distributed. It depicted that the highest responses were from the students. University-wise response structure and value of responses received showed in the Table 1.

TABLE 1
Responses Received

University	Students		Faculty members	
	Given	Response received (%)	Given	Response received (%)
U1	75	75(100%)	20	20(100%)
U2	75	72(96%)	20	14(70%)
U3	75	63(84%)	20	14(70%)
U4	75	69(92%)	20	16(80%)
U5	75	57(76%)	20	12(60%)
U6	75	69(92%)	20	12(60%)
TOTAL	450	405(90%)	120	88(73.33%)

Age profile of the respondents was asked by the questionnaire as part of the background check. (see Table 2) 70.18 per cent of respondents were between 20-30 age group due to the fact that the

higher proportion of the sampled population was students. 55 per cent of the respondents were female and 45 per cent were male.

TABLE 2
Age Profile of the Users

Age groups	Students & staff members (%)
20-30	346(70.18%)
31-40	61 (12.37%)
41-50	56(11.36%)
51-60	30(6.09%)
Total	493(100%)

OPACs in University Libraries

By the online survey we examined the current situation of OPACs in university libraries in Sri Lanka. Table 3 shows catalogue formats and types of software packages used by the universities and the modules that were operational. Although, there are 15

university libraries in Sri Lanka six universities have OPACs and only three universities have all modules in operation. Majority of university libraries was limited only to creation of bibliographical databases. All university libraries had card catalogues and computer catalogues operating simultaneously.

TABLE 3
OPACs in University Libraries in Sri Lanka

University	Available catalogue formats		Software	Modules in operation	OPAC establishment year
	Card catalogue	Card catalogue			
University of Peradeniya (U1)	√	√	Alice for Windows	cataloguing	2002
University of Colombo (U2)	√	√	Alice for Windows	cataloguing	2002
University of Sri Jayawerdhenapura (U3)	√	√	Alice for Windows	cataloguing	2002
University of Moratuwa (U4)	√	√	LIBSYS	All modules	2000
University of Ruhuna (U5)	√	√	ISURu	All modules	2002
Open University of Sri Lanka (U6)	√	√	LIBSYS	All modules	2001

Software available

Library automation software being used in the universities was investigated by the online survey.

Data revealed in the Table 4 below.

TABLE 4
Library Automation Software Details

Software	Libsys	Alice	ISURu
Functions			
Introduction	Vendor: InfoTek Consultants Pvt. Ltd: New Delhi India Commercial software Fully Integrated	Vendor: Soft link Asia Ltd: India Commercial software Fully Integrated	Based on free open source software named Koha Open source software Fully Integrated
Flat form	Windows 9x,2000, NT, XP, Unix, Novell	Windows 9x,2000, NT, XP, Unix, Novell	Windows 9x,2000, NT, XP, Unix, Linux
Modules	Acquisition, Cataloguing Circulation, SDI CAS,OPAC	Acquisition, Cataloguing, Circulation, Serial controlling, Indexing, Multimedia, SDI , Report and bulk notice, OPAC	Acquisition, Cataloguing Circulation, SDI CAS,OPAC
Standards	Z39.50 ,MARC	Z39.50 , MARC	Z39.50, MARC
Cost	20 00000+	7 00000+	Free
Technical support	Via E-mail and annual visit.	Via E-mail and annual visit.	From local office
User friendliness	Graphical User Interface	Graphical User Interface	Graphical User Interface
Searching	8 fields with Boolean operation	12 fields with Boolean operation	10 fields with Boolean operation
Multimedia facility	Available but not 100%	Available 100%	Available 100%
Screens and Menus	Fixed	Fixed	Customizable
Available universities	U4 and U6	U1, U2 and U3	U5

Available software packages can be categorized into two basic types, open source software (ISURu) and commercial software (Alice for Windows and LibSys). Alice for Windows (used in U1, U2, and U3) was a completely integrated library management system which provides powerful automatic document and

resource control. LibSys (used by U4 and U6) performed all the tasks needed to manage a library. ISURu (use in U5) was in-house developed software, which uses Koha open source software that can be freely downloaded from the internet.

OPAC Usage

The respondents were asked their preference for searching documents from the library. 32.31 per cent of respondents find books/information by browsing the book shelves. We found that they had no idea about the other information retrieval tools available in the libraries. 21.03 per cent of users actually accessed through OPAC of which the majorities were in staff members and senior students in the universities.

19.46 per cent inquired about books/information from the library staff (junior staff). 10.96 per cent of respondents inquired from friends, while 5.47 per cent who asked the faculty members and 9.72 per cent still finding Books/information from the card catalogue (see Table 5).

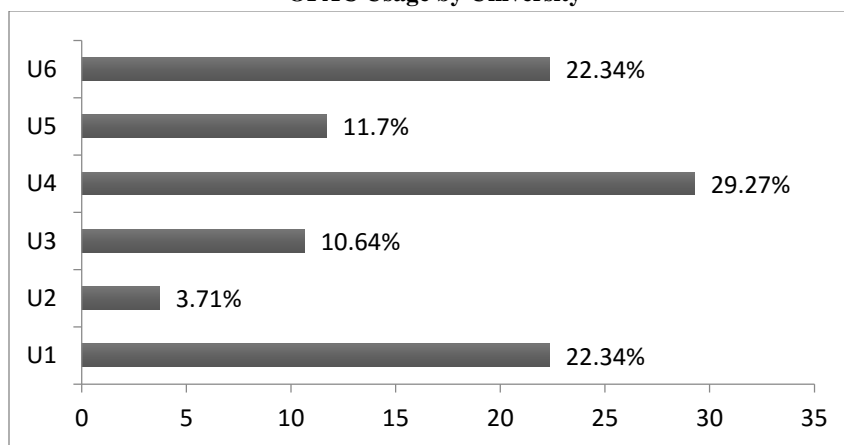
TABLE 5
Information Seeking Behavior of the Respondents

Seeking methods	Resonances
Browsed book shelves	32.31%
Search OPAC	21.03%
Inquired from library staff	19.46%
Inquired from friends	10.96%
Inquired from faculty members	5.47%
Browsed card catalogue	9.72%
unanswered	1.05%
Total	100%

Furthermore, an attempt was also made to ascertain the OPAC usage in the university libraries in Sri Lanka. U4 library OPAC reported 29.27 per cent OPAC usage while U1 and U6 remained 22.34 per cent usage rate. U5 and U3 library OPACs reported 11.7 per cent and 10.64 per cent usage respectively. Lowest

OPAC usage was revealed in U2 OPAC. Therefore, we also came to the evident conclusion that the OPAC was still not a popular search tool of the Sri Lankan university libraries. Figure 1 shows the use of OPACs by universities.

FIGURE 1
OPAC Usage by University



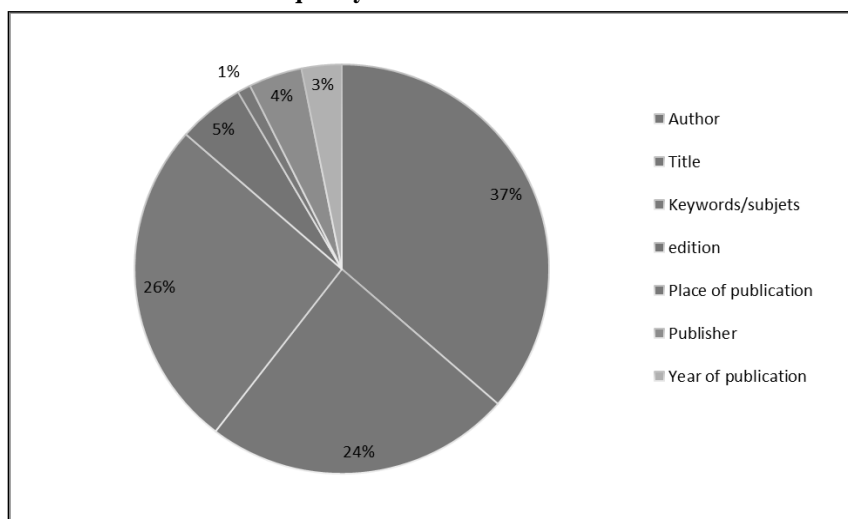
Frequency of Use of Access Points

Online survey was found that OPACs under the survey had provided seven access points illustrated in Figure 2. Respondents were asked their preference for access to the information about these access points. Majority of the respondents preferred the author searches (37 per cent) while 26 per cent of them preferred

subject or key words searches and 24 per cent of respondents preferred title searches. Our research data evidently proved that the edition of the book, place of publication, publisher and year of publication were not attractive access points among the OPAC users. Further, our participatory observation also revealed that most of the respondents were unaware of the author’s full names

or sometimes they did not have the correct spellings this situation leading to a failure of their online search and as such they went to the book shelves to find the books.

FIGURE 2
Frequency of Use of Access Points



Available Search Methods

By the online survey conducted, we found that there were four searching methods available in the OPACs (simple, Boolean, truncation and phrase searching) and the data presented in Table 6 below. The Boolean logic is offered in all OPACs (100 per cent)

while truncation searches and phrase searches could be possible in five (83.33 per cent). The proximity searches were offered in two OPACs (33.33 per cent). But unfortunately, all the respondents were unaware of these search methods offered by OPACs.

TABLE 6
Search Methods

Search methods	Boolean search	Truncation search	Phrase search	Proximity Search
University				
U1	1	1	1	0
U2	1	0	1	0
U3	1	1	1	0
U4	1	1	1	1
U5	1	1	1	1
U6	1	1	0	0
Total (%)	6(100%)	5(83.33%)	5(83.33%)	2(33.33%)

Frequency of Use of Searching Strategies

Two search methods were found by the online survey conducted: simple and advanced search (Table 7). The simple search has been provided with all OPACs (100 per cent) in the sample, advanced searching provided with 66.67 per cent of OPACs.

Furthermore, users were asked their frequency of use of searching strategies. Data revealed that the majority of respondents preferred only simple searching (85.23 per cent) while the other 14.76 per cent of respondents used both searching strategies.

TABLE 7
Searching Strategies

Availability of Searching Strategies	Availability of Searching strategies	Frequency of use
Searching Strategies		
Simple search	6(100%)	202(85.23%)
Advanced search	4(66.67%)	35(14.76%)

Search limits

Provision of a search limit gives an essential means for making the search meaningful and successful. The search can be limited to the number of options on the author, year of publication, language, location and collection. Online survey revealed that search limits on collection (i.e. Ceylon collection, reference collection, and lending collection) were possible in 50 per cent of

university library OPACs (U1, U3 and U5) and limit facility for year of publication was available in the three OPACs respectively (U3, U4 and U5). Search limits of location were provided with U4 and U5 OPACs while only U1 OPAC provided search limits to the author (see Table 8). In fact about two OPACs (33.33 per cent) did not provide any sort of search limits (U2 and U6).

Table 8
Search limits

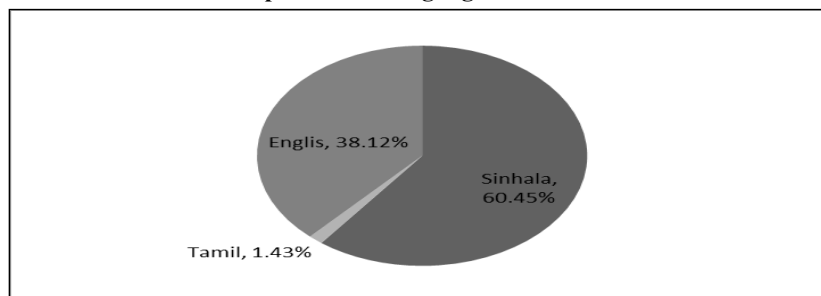
Search limits	Search limits
University	
U1	Author, Collection
U2	No
U3	Year, Collection
U4	Location, Year, Language
U5	Location, Year, Collection
U6	No

Respondent’s Language Preferences

Both Sinhala and Tamil languages are the official languages in Sri Lanka and English language is the link language. Therefore, it’s very important to provide the facility that permits users to search books/information by their mother tongues. Online survey explored that except the OPAC in U5, OPAC’s in other universities provide English as the searching language. U5 OPAC

was supported for Sinhala and Tamil language book searching. Respondents were asked their language preference by the questionnaire, date revealed that 60.45 per cent of respondents answered that they preferred books in their language (Sinhala/Tamil) further they mentioned it as the main problem they faced while they searched books through OPAC (see Figure 3).

FIGURE 3
Respondent’s Language Preferences



Utilization of Facilities Provided with OPACs

OPACs under this survey provided 11 facilities for users: availability, location and links for relevant information (author,

subject, publisher, year of publication) offered in all the OPACs (100 per cent) in the sample, while reservation and requesting facilities provided only in three (50 per cent) OPACs. The

circulation information, printing book lists, saving required records, sorting facilities, and help messages provided only in two (33.33 per cent) OPACs. Only U5 library OPAC (16.67 per cent) provided book bags or creates one's own online book shelf for further references. Respondents were asked utilization of facilities provided with OPAC (see Table 9). Data indicated 34.18 per cent of respondents found location of books/information through

OPAC while 32.49 per cent of them searched the availability of books/information. 16.88 per cent of respondents searched circulation data while 11.81 per cent of respondents reserved books. Our data proved that overall there is no clear understanding of other facilities provided with the OPACs among respondents.

TABLE 9
Utilization of Facilities Provided by OPACs

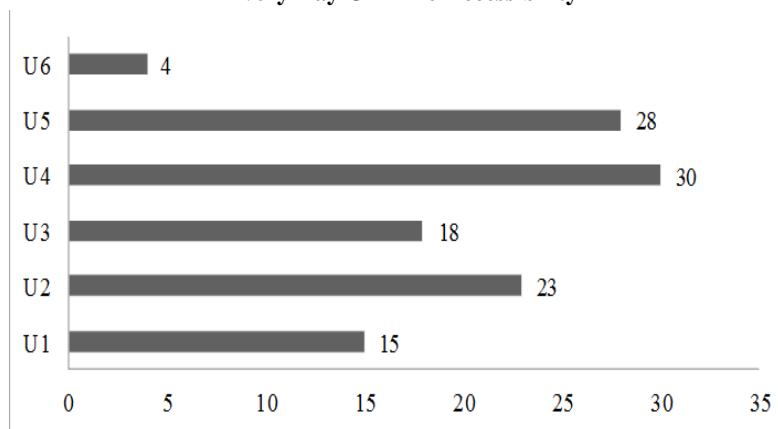
Facility	Responses (%)
Availability	77(32.49%)
Location	81(34.18%)
Circulation data	40(16.88%)
Reservation	28(11.81%)
Printing book lists	1(0.42%)
Saving book lists	3(1.27%)
Sorting	1(0.42%)
Requesting	0(0.00%)
Links	4(1.69%)
Help messages	1(0.42%)
Book bag creation	1(0.42%)
Total	237(100%)

Everyday On-Line Accessibility

OPAC's every day (24 hours/7 days) accessibility is vital for asseverate trustworthiness of customers. Possibilities of everyday accessibility explored by the online survey during the 30 days of all sampled OPACs (see Figure 4). Our survey evidently proved that only U4 provided the everyday accessibility 30 days (100 per cent) while U5 library OPAC provided 28 days (87.5 per cent) and U2 OPAC could be accessible only 23 days (68.75 per cent)

respectively. OPAC of the U1 library provided 15 days accessibility (50 per cent) while U3 OPAC provided 18 days (53.13 per cent) accessibility during the survey conducted. Lowest accessibility reported on U6 OPAC (9.38 per cent). The reasons for low rates of everyday accessibility were interruption in the network, power failure, weather conditions, technical errors and unrecognized errors.

FIGURE 4
Every Day On-Line Accessibility

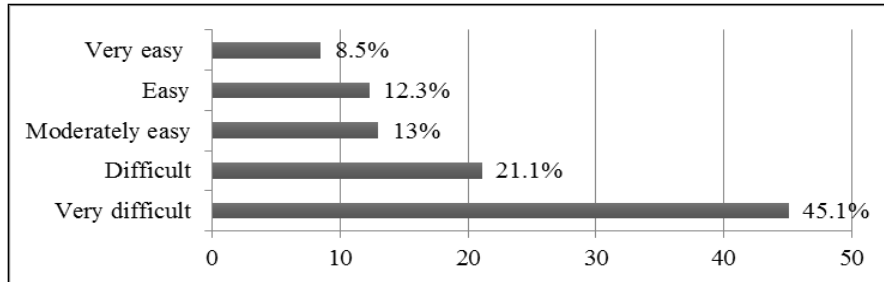


User Friendliness of OPAC

Respondents were asked by the questionnaire regarding user friendliness of the OPAC according to their experiences, a large portion (66.20 per cent) of respondents were classified under

difficult and very difficult to use as shown in Figure 5 below. This revealed that a higher percentage of the respondents were under the idea that OPAC is very difficult to use due to their personal experiences.

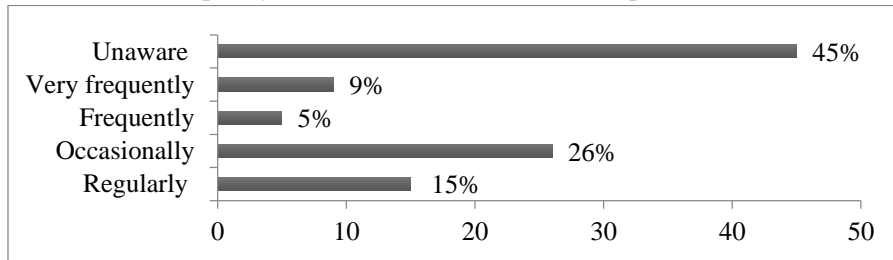
FIGURE 5
User Friendliness of OPAC



The main cause for the result displayed in figure 5 was because of the users' less utilization of different help methods provided. About half of the respondents (45 per cent) were unaware of the on-screen or printed help materials provided. 15 per cent of

respondents used the on-screen help regularly and 26 per cent of them used printed help materials occasionally. Figure 6 illustrates the frequency of on-screen/ printed help materials.

FIGURE 6
Frequency of Use of On-Screen/ Printed help Materials

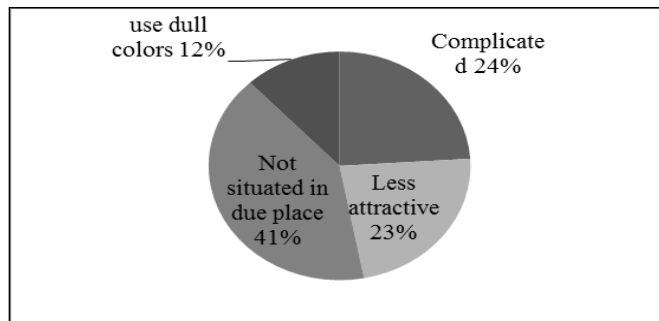


OPAC Interface

The interface should be simple and pleasant with aesthetic appeal to get users attraction for the OPAC. It was negative finding that approximately half of respondents reported (47 per cent) it was very complicated and less attractive OPAC interfaces as revealed

in the Figure 7. But at the same time a majority of respondents (41 per cent) mentioned that OPAC icon has not situated in due place in the library home page while 12 percent of respondents reported OPAC used dull colors for their interfaces.

FIGURE 7
OPAC Interface

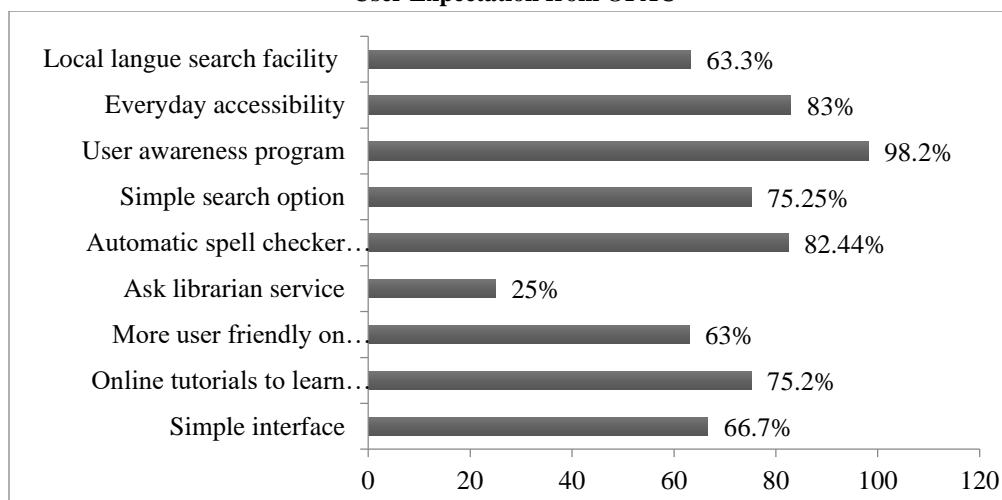


User Expectations from OPAC

The respondents were given several options and were asked to indicate the facilities/service they would like to be improved or incorporated in the OPAC system (see Figure 8). The majority of respondents (98.2 per cent) were liked to obtain OPAC awareness programs while 83 per cent of respondents indicated the necessity of everyday accessibility and 82.44 per cent of respondents liked

to get automatic spell checker facility from the OPAC. Two-third of respondents indicated tutorials on OPAC and simple search options were vital. Further, respondents were expected the simple OPAC interface (66.7 per cent) and local language search facility (63.3 per cent) by the OPA.

FIGURE 8
User Expectation from OPAC



CONCLUSION

This study checked the background information extensively, on a global and specific scale. It then analyzed present situation and users expectations of university library OPACs in Sri Lanka. Further revealed that, there were six OPACs out of 15 university libraries in the country and three different software packages (Alice for Windows, LibSys and ISURu) being used by the six OPACs. Both card catalogue and OPAC were updated simultaneously by the libraries and half of libraries indicated operation of all modules while others had cataloguing the module in operation. Out of six libraries half of them (U1, U2 and U3) used Alice for Widows software while two libraries (U4 and U6) used LibSys software and U4 university used in-house developed software (ISURu).

Information seeking behavior of the respondents of selected university libraries preferred to browse the bookshelf, than to browse using the card catalogue or OPAC system. The usage level of OPAC was even not up to 50 per cent. According to our observations, we noticed that many users directly went to the bookshelf without proper knowledge about the materials available in the library. Therefore, study revealed that OPACs were not popular retrieval tool for the libraries and that majority of users were unaware of the OPACs and its inner workings. Most of the respondents search information on title or author and they did not

use Boolean or other advanced search techniques. In addition to that, respondents were not concerned about other access points, which are specially provided with OPACs (i.e. by publisher, by year etc.). Some universities provided accession number, borrower details as access points, these access points were underutilized.

Limited searching facility was available in the all OPACs but majority of respondents were unaware about that. Among six OPACs five of them provided simple and advanced searching facility. However, our observations found out that users were using only simple searching strategies. They immediately type their query in the search box and do searches. The U5 provides inspiring the facility such as 'book bag' to keep our own bookshelf on the web for further reference. The research data proved that overall there was no clear understanding of other facilities provided with the OPACs among respondents. Majority of respondents complained they could not find library materials by their native language (Sinhala/Tamil) while others mentioned everyday accessibility is also indeed necessary. Furthermore, research revealed that the user friendliness is a crucial issue in using OPAC. Further respondents pointed out that OPAC interfaces were very complicated and less attractive while rest of respondents reported OPAC icon did not get its due place in the university home page and most of the OPAC interfaces used dull

colors. Majority of the responses pointed out that OPAC was very difficult to use and reason behind this was the respondents' less use of on-screen and printed user help. Respondents expected to get user awareness programs, everyday accessibility and the automatic spell checker facility from their library OPACs.

RECOMMENDATIONS

These recommendations aim at improvements to the OPAC system in Sri Lanka. The results of the research shed light on ways to do so.

- Provide continuous formal OPAC awareness programs to the users through hands on sections, online training and printed manuals.
- Users should be educated about the inner works and importance of OPACs.
- Technical advancement of the system is vital for overcoming the primary issues related to OPACs.
- Attention should be paid to everyday accessibility.
- The native language searching capabilities should be made available.

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— This article does not have any appendix. —