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**Knowledge, Satisfaction and Challenges on Online Public Access Catalog
in an Academic Library in Northern Philippines**

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ABSTRACT

Information resource is meaningless without access. Online Public Access Catalog (OPAC) has this role to connect with the users and provides access to all available information resources within the library. The goal of academic libraries then is to enhance information access which serves as a gateway to all learning resources. This study aimed to assess the level of knowledge, satisfaction and challenges on OPAC among students of Saint Mary's University, Philippines using quantitative method of research. Data were gathered from the 672 undergraduate students, who are actually using the OPAC, from the School of Accountancy and Business (SAB), School of Teacher Education and Humanities (STEH), School of Engineering, Architecture and Information Technology (SEAIT), and School of Health and Natural Sciences (SHaNS) through survey questionnaire. Results revealed that students have low level of knowledge; slightly satisfied; and experienced challenges in using the OPAC. Interestingly, there is a significant difference on the level of knowledge and satisfaction of the respondents when grouped according to sex, school and their frequency of use. Since the students had low satisfaction in using OPAC, the library must enhance its OPAC service to further improve its delivery of information and to meet the users need.

Keywords: Academic libraries, Access to information, Information analysis, Information retrieval systems, Library management systems, Online catalogs, OPAC, Technical services

Rationale

Libraries have the essential role in the advancement of organization of knowledge and information. They need to determine their status and conditions to a level that will meet satisfactorily the demands and expectations of the millennial library users. It is also their goal to improve the information retrieval system to enhance access to knowledge and information. It plays as a primary gateway to all learning resources. Knowledge and information is pointless without access.

With the influence of information and communications technology, libraries have made their Online Public Access Catalog (OPAC) accessible to users for such purpose. OPAC is the online evolution of the card catalog which provides fast and easy retrieval of print and non-print resources such as books, journals, magazines, newspapers, audio-visuals, government publications, theses and electronic resources. Therefore, using the library's OPAC, information searchers can access the bibliographic records of all available information resources independently.

OPAC is a necessity in any higher education institutions like Saint Mary's University (SMU) of Bayombong, Philippines, envisioned to nourish the quest for learning the pursuit of intellectual growth, the concern for cultural heritage and the need for information of its students, faculty and staff, and other clients. Thus, in support to its quest for Christian quality education, the University Learning Resource Center's OPAC underwent migration of library management system from Athena to KOHA, and to Destiny Library Management System. The changes were brought about by: 1) the implementation of RDA bibliographic standards; 2) international MARC standards; 3) RFID compatibility for future integration; and 4) availability of technical support when needed. Its effective use may depend on the library instruction or procedural

guidelines. In such situation, the libraries should examine periodically how much comfort the users feel with this service so that some initiatives could be taken timely to improve the service.

Statement of the Problem

From the above context, this study was conceptualized. The study aimed to assess the level of knowledge, satisfaction and challenges on OPAC among the students of SMU. Specifically the study was conducted to answer the following questions: 1) What is the profile of the respondents according to: a) sex, b) school department, c) year level, and d) frequency of use?; 2) What is the respondents' level of knowledge and satisfaction on the use of OPAC; 3) Is there a significant difference in level of knowledge and level of satisfaction when grouped in terms of profile?; and 4) What are the challenges encountered in the use of OPAC?

Statement of the Null Hypothesis

There is no significant difference in the level of knowledge and level of satisfaction when grouped according to profile.

Literature Review

Online Public Access Catalog. It is a bibliography of a library collection that is available to the public (Smith, 2011); a database of bibliographic records describing the library holdings (Gohain & Saikia, 2013); used to find out what materials are available; contains all the bibliographic information of an information center (Sankari, Chinnasamy, Balasubramanian, & Mathuraj, 2013); designed to allow complete retrieval (Wells, 2007); and a useful tool for browsing collection, finding specific titles and ordering materials online (Turnpike, 2014). Online catalogs had been moved beyond the scope of individual library collections, thus creating tensions between their roles as indexes and as information sources in their own right. It also allows users to search a document by authors, titles, subject and keywords from a terminal and

allows printing, downloading or exporting records via different electronics means. Thus, it provides users a means of searching and accessing information. Users can see the collections and issue status of each document of the library and can reserve and renew a document of their interest when needed. The most basic function of the OPAC is for browsing the entire collection. It can be used to look for something specific or general which will focus on basic searching, which is the default mode. If you are searching for something specific, you want to use the advanced search option, which allows you to conduct a multiple term search (Perkins, 2007).

Knowledge on the Use of OPAC. The changes in the behavior of users, from all types of library, had been documented in a large study by the Online Computer Library Center (OCLC, 2005). In the wake of the digital revolution, libraries started rethinking their catalogs and reshaping them along the lines that had been set by popular search engines (Christensen, 2003). In order to meet the challenges in the new millennium, without wasting further time, it was recommended that all academic libraries must reintroduce and upgrade their information technology and computer systems to render better services to users. The ultimate goal is that users will be comfortable and confident using library OPACs for their information needs wherever a computer is available and without special training. Studies revealed that there is a high percentage of library users regarding the use OPAC in five academic libraries in New Delhi (Ansari (2008); respondents prefer to use OPAC to search for library resources while of library users of Devi Ahilya University consult library staff to access materials they need in the library (Mulla & Chandrashekara, 2009); and majority were not aware of the library catalogue and use which lead them not to use the catalog (Islam, 2010).

Satisfaction on Use of OPAC. Applegate (1997) as cited by Ijiekhuahen, Blessing & Omosekejimi (2015) defines user satisfaction as “a personal, emotional reaction to a library service or product”. Satisfying users’ needs in the academic libraries has been the primary objective of libraries and librarians. Every year, new students come to the university with different needs and expectations. Furthermore, new technologies, databases, and more innovative systems for accessing information, had made the library more complicated and challenging for librarians and users alike. The abundance of resources available and the difficulty in being able to evaluate these resources also create problems for users. The inability to easily identify the specific use of a library’s services because of the new technologies, and the difficulty to access information sources can all contribute to user dissatisfaction among academic library users. (Kassim, 2009). On the other hand, Matthews (2007) as cited by Cabfilan (2012) defines satisfaction as a sense of contentment that results from an actual expected experience. He further states that satisfaction survey asks the client to assess the quality and utility of library services. If applied in appropriate manner, a customer satisfaction survey allows the library to learn what matters to customers and apply that information to improve service delivery. Most satisfaction surveys ask the clients to evaluate the effectiveness of the services provided and assess the degree to which is or her needs was met. Customer satisfaction has its very nature, is inward and backward looking (a lagging indicator performance). In order to improve customer satisfaction, the gaps that exist between a customer expectations and the service actually provided must be reduced overtime.

The study of Mulla and Chandrashekara (2009) revealed that the satisfaction levels of their respondents were quite encouraging and they were much satisfied with the performance and quality of OPAC services. The use of OPAC by students and faculty members has increased

their information, retrieval rate especially in locating books and other reading materials in the library. This is evident in the fact that all the respondents are satisfied with their search outputs. (Sankari, 2013).

Challenges in Using OPAC. In the advent of the web, users started doing their research anywhere but in the library, because catalogues (as well as other bibliographic research tools) were simply too hard to use in comparison with other platforms. (Christensen, 2003). The study of Mulla and Chandrashekara (2009) revealed that the users' lack of skills to use OPAC independently is the common problems encountered by their respondents, followed by lack of awareness about OPAC and lack of proper guidance to use OPAC. Problems of password protection, were not interested due shortage of terminals and lack of awareness about the facilities respectively. Another thing that results to the users problem is their improper working on the OPAC module and lack of orientation from the library staff.

On the other hand Adedibu (2008) as cited by Adenike and Akin (2014), in his study on catalogue use by science students in the University of Ilorin found out that the card catalogues and the OPAC, the most essential library tools in accessing the library collection, are not always consulted because of inadequate knowledge on how to use them. On Ampka's (2000) study on the use of University of Maiduguri Library found out that majority of the students did not use the library effectively due to lack of interest on the use of library catalogues. The study of Adenike and Akin (2014) has dealt with the effect and constraints of using the Online Public Access Catalogue (OPAC) among undergraduate students. The result of their study shows that students agreed that the OPAC is faster than the manual catalogue.

Novotny (2004) as cited by Thanuskodi (2012), conducted a protocol analysis study to determine the usability of the Pennsylvania State University Library OPAC. It is found in the

study that the use of internet search engines has had a great effect on the way that library patrons try to use and the expectations that they have for library OPACs. This created some problems for participants and highlighted areas of the catalog that could be modified to help users search more effectively because library OPACs are not necessarily designed to work in the same way as internet search engines.

A concern with the library OPAC was that it was frequently inaccessible from the rest of the library website and the web. It can be difficult to conduct a search from the catalog to the web or from the library website to the OPAC. The OPAC may have a special explicit user interface from the rest of the library website and may look unlike and interact differently with users. This can be puzzling to the users when they are trying to search for information. The users may have to search many different places i.e. databases, indexes, digital repositories, and the OPAC. Despite common use of Internet search engines, the online catalogue is still the main way to access the collection of a library. The use of an Internet search engines has implications for user expectations around the online catalogue, and search strategy when using the online catalogue. (Satpute & Chavan, 2003)

Search and retrieval of library materials has become easy due to OPAC. But it has been observed in some instances, that users are not coping with this change. There seems to be two reasons for this. Firstly, some users lack computer knowledge and hence are reluctant to accept the change and secondly, the designs of the interfaces of some systems are not user friendly (Umarani et al, 2008). Umarani and others observed that personal and extended help is possible from library staff to the users to search OPAC effectively within the library. But it becomes difficult to provide such a help to online users. Therefore, it becomes essential to design user friendly OPACs and to test them for usability on a regular basis. Mansor (2007) conducted a

study on "Heuristic Evaluation of Interface Usability for a Web-based OPAC" at the IIUM university Library, and the results revealed that there was lack of visibility of interface status in IIUM Web OPAC interface. The study further revealed that the most obvious weakness of the interface is the lack of a proper messaging system, to inform users on the system's status during delays, as reported by 60% of respondents (Ruzugea, 2012).

Methodology

The research was conducted to determine the level of knowledge, satisfaction and problems encountered by the students of Saint Mary's University on Online Public Access Catalog (OPAC) during the second semester of schoolyear 2016-2017. Data were gathered from the 672 undergraduate students, who are actually using the OPAC, from the School of Accountancy and Business (SAB), School of Teacher Education and Humanities (STEH), School of Engineering, Architecture and Information Technology (SEAIT), and School of Health and Natural Sciences (SHaNS) through questionnaire. The instrument also underwent reliability test to assess its effectiveness. The Cronbach alpha coefficient is computed in following scales: A at .909; B at .926; C at .892 and D at .657.

Results and Discussions

1. The Demographic Profile of the Respondents

Table 1 shows the total frequency and percentage distribution of OPAC users in terms of sex, school department, school year, and frequency of use.

Table 1. Demographic Profile of the Respondents

Demographic Profile	Frequency	Percentage
A. Sex		
Male	258	38.4%
Female	405	60.3%
Missing Answer	9	1.3%
Total	672	100.0%
B. School		
STEH	91	13.5%
SEAIT	159	23.7%
SHaNS	93	13.8%
SAB	329	49.0%
Total	672	100.00%
C. Year Level		
2nd year	179	26.6%
3rd year	238	35.4%
4th year	192	28.6%
5th year	12	1.8%
Missing Answer	51	7.6%
Total	672	100.0%
D. Frequency of use		
Everyday	19	2.8
Once a week	164	24.4
Twice a week	71	10.6
Once a month	386	57.4
No Answer	32	4.8
Total	672	100.0%

There are more female (60.3%) users than male (38.4 %) as shown in Table 1. In terms of school, the highest number of users comes from the School of Accountancy and Business (49%), followed by the School of Engineering, Architecture, and Information Technology (23.7%); the School of Health and Natural Sciences (13.8%); and the School of Teacher Education and Humanities (13.5%) having the lowest number of OPAC users. Most of the respondents are from the 3rd year (35.4%), followed by 4th year (28.6%), 2nd year (26.6%), then 5th year (1.8%). When it comes to frequency of use, 57.4% respondents use OPAC once a month, 24.4% for once a week, 10.6% for twice a week, and 2.8% claimed to use everyday.

2. Level of Knowledge and Satisfaction on the Use of OPAC

2.1. Level of Knowledge in Using OPAC. Kumar and Vohra (2011) pointed out that information retrieval (IR) in an OPAC requires conceptual knowledge of the IR process, semantic knowledge of how to effectively execute a query, and technical skills to implement the query. Hence, OPAC searchers are facing difficulties for a long time. The users' knowledge about using OPAC is an essential factor for searching resources of a library efficiently. Table 2 presents that the respondents' level of knowledge in using OPAC.

Table 2. Level of Knowledge in Using OPAC

Features of OPAC	Mean	Std. Deviation	Qualitative Description
1a. Hyperlinked digital resources or online resource	3.34	.87	Low
1b. Making bibliography from the OPAC	3.33	1.11	Low
1c. Managing your OPAC account in the ULRC	3.39	.84	Low
2. Locating learning resources on the OPAC	2.46	.835	High
3. Using Boolean operators in the OPAC	3.21	1.36	Low
4. Viewing search results	2.28	.91	High
5. Identifying the item type of the materials	2.81	.95	Low
6. Knowing the status of the books as to its availability	2.73	.95	Low
7a. MARC view	3.44	.83	Low
7b. Normal view	2.67	1.05	Low
7c. ISBD view	3.45	.80	Low
8. Using the searching modules (basic, advances, subject, search)	3.13	.83	Low
9. Using searchable terms or access points	2.65	.80	Low
10. Interpreting the bibliographic data	3.08	.856	Low
Mean	3.00	.60	Low

Legend: 1.00- 1.49 Very High 1.50 – 2.49 High 2.50 – 3.49 Low 3.50 – 4.00 Very Low

Overall, the level of knowledge of the students in using OPAC is low (mean=3.00). However, they have high level of knowledge on locating learning resources on the OPAC (mean=2.46) and on viewing search results (mean=2.28). Generally, they have low level of knowledge on using the different aspects of the OPAC such as: using normal view (mean=2.67), MARC view (mean=3.44), and ISBN view (mean=3.45); knowing the status of the book as to its availability (mean=2.73); identifying the item type of the materials (mean=2.81); using

searchable terms or access points (mean=3.06); interpreting the bibliographic data (mean=3.08); using searching modules (mean=3.13); using Boolean operators in the OPAC (mean=3.21); making bibliography from the OPAC (mean=3.33); using hyperlinked digital resources or online resources (mean=3.34); and managing their OPAC account (mean=3.39).

This simply highlights the challenges faced by students when using the OPAC. The result conveys that the respondents do not have enough knowledge about the features and the use of OPAC. Their lack of awareness about the facets of the OPAC may possibly contribute to their negative attitude and behavior when using the OPAC. The findings agree to the study of Kumar and Vohra (2011) on the usage of OPAC that majority of their respondents faced difficulty when using them and they have not acquired basic skills to apply effective strategies such as subject, keyword, call number, and combined search options.

2.2. Level of Satisfaction in Using OPAC. Webster (1997) as cited by Baldonado (2013) wrote that the most important challenge faced by academic libraries is securing construction change and improving library performance. Any organization must grow and develop in order to successfully accommodate a changing environment if libraries are to serve as active partners in the instructional and research program of the university. They must be sensitive to changing conditions of both internal structure and external environment. Thus, the need to develop acquisition of knowledge and skills through literacy and hands-on activities is important in order to increase OPAC usability. Table 3 shows the respondents' level of satisfaction in using OPAC.

Table 3. Level of Satisfaction on the Use of OPAC

Items	Mean	Std. Deviation	QD
1. Availability of computer units for OPAC purposes	2.59	.80	Low
2. Functionality of mouse and keyboard for the OPAC	2.20	.84	High
3. Location of the OPAC (available in the different sections)	2.83	.88	Low
4. Speed of searching books and other materials	2.47	.77	High
5. Relevance of search results	2.60	1.40	Low
6. Needed bibliographic information such as author, title, etc.	2.56	.77	Low
7. Accuracy of bibliographic information	2.62	.82	Low
8. Availability of OPAC in the web	3.03	.80	Low
9. Display of search results such MARC view, normal view, and ISBD view	2.79	.78	Low
10. Displayed guidelines on the use of OPAC	3.32	.90	Low
Mean	2.70	.58	Low
Legend: 1.00- 1.49 Very High	1.50 – 2.49 High	2.50 – 3.49 Low	3.50 – 4.00 Very Low

Table 3 revealed that the overall level of satisfaction is low (mean=2.70) which signifies that the respondents are not satisfied whenever they are using the OPAC. Users have a low level of satisfaction on: availability of computer units for the OPAC purposes (mean=2.59), and location of the OPAC (available in the different sections) (mean=2.83). This means that when the users want to use the OPAC in searching for library materials, the computers are not available or it is turned off. Users find that the computer units available in the different sections of the library are insufficient. Similar findings can also be seen in the study of Kumar and Vohra (2011) that only small portions of the users are satisfied with the OPAC with only 1.3 % were fully satisfied. Low level of satisfaction can also be seen in other items like on the needed bibliographic information such as author, title, etc. (mean=2.56), relevance of search results (mean=2.60), accuracy of bibliographic information (mean=2.62), display of search results such MARC view, normal view, and ISBD view (mean=2.79), availability of OPAC in the web (mean=3.03), and on displayed guidelines on the use of OPAC (mean=3.32).

Users have only high level of satisfaction on the functionality of mouse and keyboard for the OPAC (mean=2.20) and on speed of searching books and other materials (mean=2.47). This shows that they are contented on how the mouse and keyboard are working. Their high satisfactory level on the speed of OPAC in searching for materials means that the internet connection is fast that they are able to locate the materials they need quickly.

3. Significant Differences and Comparison on the Level of Knowledge and Satisfaction

3.1. Significant Differences and Comparison on the Level of Knowledge

3.1.1. Significant Difference on the Level of Knowledge By Sex. Table 4 presents the significant difference on level of knowledge when grouped according to sex.

Table 4. Significant difference on level of knowledge when grouped according to sex

Sex	N	Mean	SD	QD	t-test for Equality of Means		
					t	df	Sig. (2-tailed)
Male	258	2.91	.61	Low	-3.233	661	.001
Female	405	3.06	.58	Low			

Legend: 1.00- 1.49 Very High 1.50 – 2.49 High 2.50 – 3.49 Low 3.50 – 4.00 Very Low

Based on the table, males (mean=2.91) obtained higher mean score than the females (mean 3.06). The independent t-test was used to compare the difference in the mean score yielded a t-value Of -3.233 that have a significant level of 0.001 which is lower than 0.05. This means that the level of knowledge of male respondents is significantly different than that of the female respondents. This implies that sex can influence the level of knowledge when using the OPAC.

3.1.2. Significant Difference on the Level of Knowledge By School. To determine if there is significant difference in the mean scores of the various groups, the Brown-Forsythe test was run as shown in Table 5.

Table 5. Significant difference on level of knowledge when grouped according to school

School	Descriptive				Brown-Forsythe		
	N	Mean	SD	QD	Statistic	df	Sig.
STEH	91	2.77	.40	Low	13.537	3	.000
SEAIT	159	2.90	.71	Low		447.082	
SHaNS	93	3.26	.57	Low			
SAB	329	3.04	.56	Low			
Total	672	3.00	.60	Low			

Legend: 1.00- 1.49 Very High 1.50 – 2.49 High 2.50 – 3.49 Low 3.50 – 4.00 Very Low

Statistically, the test for homogeneity of variance yielded significance at .05 resulting to the use of Brown-Forsythe which yielded significance at .000. This means that there is significant difference in the respondents’ level of knowledge when grouped according to school.

3.1.3. Comparison on the Level of Knowledge By School. Table 6 presents the result of Games-Howell multiple comparison test on the level of knowledge of the respondents when grouped according to school.

Table 6. Comparison on level of knowledge when grouped according to school

School	School	Mean Difference	Sig.
STEH	SHaNS	-.486	.000
	SAB	-.263	.000
SEAIT	SHaNS	-.362	.000
SAB	SHaNS	-.223	.005

Legend: 1.00- 1.49 Very High 1.50 – 2.49 High 2.50 – 3.49 Low 3.50 – 4.00 Very Low

Games-Howell multiple comparisons revealed that SHaNS compared to other schools has significantly higher level of knowledge. The computed significance shows that the SHaNS compared to STEH and SEAIT have significantly higher level of knowledge (Sig.=.000). When compared to SAB, SHaNS is significantly higher (Sig.= .005) on level of knowledge when using the OPAC. This implies that the respondents’ level of knowledge is influenced by the school they are enrolled in.

3.1.4. Significant Difference on the Level of Knowledge By Year Level. Table 7

summarizes the significant difference on level of knowledge when grouped according to year level.

Table 7. Significant difference on level of knowledge when grouped according to year level

Year Level	Descriptive				ANOVA		
	N	Mean	SD	QD	F	df	Sig.
2nd year	179	2.93	.62	Low	2.096	3	.100
3rd year	238	3.05	.60	Low		617	
4th year	192	2.98	.52	Low			
5th year	12	2.78	.55	Low			
Total	621	2.99	.59	Low			

Legend: 1.00- 1.49 Very High 1.50 – 2.49 High 2.50 – 3.49 Low 3.50 – 4.00 Very Low

To determine if there is significant difference in level of knowledge when grouped according to year level, the ANOVA test was run. The test yielded significance at .100 which is higher than .05. It implies that there is no significant difference on the level of knowledge when using the OPAC when grouped according to year level. This means that the year level of the respondents does not affect their level of knowledge in using the OPAC.

3.1.5. Significant Difference on the Level of Knowledge By Frequency of Use. The

significant difference on the level of satisfaction of the respondents on the use of OPAC when grouped according to frequency of use is shown in Table 8.

Table 8. Significant difference on level of knowledge when grouped according to frequency of use

Frequency	Descriptive				Brown-Forsythe		
	N	Mean	SD	QD	Statistic	df	Sig.
everyday	19	2.19	.59	High	42.06	3	.000
once a week	164	2.80	.55	Low		123.93	
twice a week	71	2.61	.65	Low			
once a month	386	3.19	.49	Low			
Total	640	2.99	.59	Low			

Legend: 1.00- 1.49 Very High 1.50 – 2.49 High 2.50 – 3.49 Low 3.50 – 4.00 Very Low

To determine if there is significant difference in the various schools, the Brown-Forsythe test was used. The result shows that there is significant difference on the level of knowledge when grouped according to frequency of use (Sig.=.000).

3.1.6. Comparison on the Level of Knowledge By Frequency of Use.

Table 9. Comparison on the level of knowledge when grouped according to frequency of use

Frequency of use	Frequency of use	Mean Difference	Sig.
everyday	once a week	-.61	.002
	once a month	-1.00	.000
once a week	once a month	-.39	.000
twice a week	once a month	-.58	.000

Legend: 1.00- 1.49 Very High 1.50 – 2.49 High 2.50 – 3.49 Low 3.50 – 4.00 Very Low

To determine on what frequency of use is significantly different, Games-Howell test was used. The result shows that once a month users yielded significance at .000 which is less than .05. It means that once a month users is significantly different when compared to everyday, twice a week, and once a week users. The table also shows that once a week users is significantly different when compared to everyday users (Sig.=.002). This may suggest that the level of knowledge of the respondents is affected on how they often use the OPAC.

3.2. Significant Differences and Comparison on the Level of Satisfaction

3.2.1. Significant Difference on the Level of Satisfaction By Sex. Table 10 shows the significant difference on level of satisfaction when grouped according to sex.

Table 10. Significant difference on level of when grouped according to sex

Sex	N	Mean	SD	QD	t-test for Equality of Means		
					t	df	Sig. (2-tailed)
Male	256	2.62	.56	Low	-3.096	659	.002
Female	405	2.76	.58	Low			

Legend: 1.00- 1.49 Very High 1.50 – 2.49 High 2.50 – 3.49 Low 3.50 – 4.00 Very Low

It is shown in Table 10 that females got the mean score of 2.76 while the males got the mean score of 2.62. This suggests that males have higher mean score than females. The

independent t-test was used to compare the difference in the mean score yielded a t-value of negative 3.096 that have a significance level of .002 which is lower than 0.05. This means that the level of satisfaction of the male respondents is significantly higher than the female respondents. This indicates that sex can affect the level of satisfaction when using the OPAC.

3.2.2. Significant Difference on the Level of Satisfaction By School. Table 11 shows the significant difference on level of satisfaction when grouped according to school.

Table 11. Significant difference on level of satisfaction when grouped according to school

School	Descriptive				Brown-Forsythe		
	N	Mean	SD	QD	Statistic	df	Sig.
STEH	91	2.62	.44	Low	13.641	3	.000
SEAIT	157	2.78	.68	Low		452.362	
SHaNS	93	2.38	.55	High			
SAB	329	2.78	.54	Low			
Total	670	2.70	.58	Low			

Legend: 1.00- 1.49 Very High 1.50 – 2.49 High 2.50 – 3.49 Low 3.50 – 4.00 Very Low

To determine if there is significant difference in the various schools, Brown-Forsythe test was used. The result shows that there is a significant difference (Sig.=.000) on the level of satisfaction when grouped according to school.

3.2.3. Comparison on the Level of Satisfaction By School. The table presents the result of the Games-Howell multiple comparison test on the level of satisfaction of the respondents on the use of OPAC when grouped according to school.

Table 12. Comparison on the level of satisfaction when grouped according to school

School	School	Mean Difference	Sig.
STEH	SHaNS	.234	.010
	SAB	-.158	.024
SEAIT	SHaNS	.394	.000
SAB	SHaNS	.393	.000

Legend: 1.00- 1.49 Very High 1.50 – 2.49 High 2.50 – 3.49 Low 3.50 – 4.00 Very Low

Games-Howell multiple comparison reveals that SHaNS have significantly higher level of satisfaction than STEH, SEAIT and SAB. But when SAB is compared to STEH, SAB have significantly higher level of satisfaction.

3.2.4. Significant Difference on the Level of Satisfaction By Year Level. Table 13

illustrates the significant difference on level satisfaction of the respondents on the use of OPAC when grouped according to year level.

Table 13. Significant difference on level of satisfaction when grouped according to year level

Year Level	Descriptive				ANOVA		
	N	Mean	SD	QD	F	df	Sig.
2nd year	179	2.59	.59	Low	2.483	3	.060
3rd year	238	2.75	.55	Low		617	
4th year	192	2.68	.58	Low			
5th year	12	2.70	.46	Low			
Total	621	2.68	.58	Low			

Legend: 1.00- 1.49 Very High 1.50 – 2.49 High 2.50 – 3.49 Low 3.50 – 4.00 Very Low

In determining the significant difference of the different year levels, the ANOVA test was run. The test yielded significance at .060 which is higher than .05. It means that there is no significant difference on the level of knowledge when in using the OPAC when grouped according to year level.

3.2.5. Significant Difference on the Level of Satisfaction By Frequency of Use. The

significant difference on level of satisfaction of the respondents on the use of OPAC when grouped according to frequency of use is shown in Table 14.

Table 14. Significant difference on level of satisfaction when grouped according to frequency of use

Frequency	Descriptive				Brown-Forsythe		
	N	Mean	SD	QD	Statistic	df	Sig.
everyday	19	2.32	.75	High	14.12	3	.000
once a week	164	2.49	.50	High		74.56	
twice a week	71	2.55	.60	Low			
once a month	386	2.82	.54	Low			
Total	640	2.69	.57	Low			

Legend: 1.00- 1.49 Very High 1.50 – 2.49 High 2.50 – 3.49 Low 3.50 – 4.00 Very Low

The Brown-Forsythe was used to determine the significant difference of the different year levels. The test yielded significance at .000 which is lesser than .05. Apparently, the result shows that there is significant difference on the level of satisfaction when grouped according to frequency of use.

3.2.6. Comparison on the Level of Satisfaction By Frequency of Use. Table 15 shows the result of the Games-Howell multiple comparison test on the level of satisfaction of the respondents when they are grouped according to their frequency of use.

Table 15. Comparison on level of satisfaction when grouped according to frequency of use

Frequency of use	Frequency of use	Mean Difference	Sig.
once a month	everyday	.50	.045
	once a week	.32	.000
	twice a week	.26	.005

Legend: 1.00- 1.49 Very High 1.50 – 2.49 High 2.50 – 3.49 Low 3.50 – 4.00 Very Low

The table conveys once a month users is significantly different when compared to other frequencies. When compared to everyday users, once a month is significantly different at Sig.=.045. The same is trough when it is compared to once a week where once a month yielded significance at .000 and when compared to twice a week where once a month yielded significance at .005.

3. Challenges Encountered in using the OPAC

Search and retrieval of library materials become easy due to OPAC but it has been observed in some instances, that users are not coping with this change. Thus, there must be reasons for this.

Table 16. Challenges encountered in using the OPAC

Challenges in using the OPAC	YES		NO	
	f	%	F	%
The OPAC is complicated to use	287	42.7	385	57.3
The OPACs' search results is limited	235	35.0	437	65.0
The OPACs' search results are irrelevant	166	24.7	506	75.3
The OPACs' searching capability is very slow	130	19.3	542	80.7
The computer units dedicated to OPAC is very limited	270	40.2	402	59.8
The OPAC has inadequate access points or searchable terms	155	23.1	517	76.9
The OPAC terminals lack instruction on how to use them	502	74.7	170	25.3

Table 16 revealed that the main problem in using the OPAC is the lack of instructions in every terminal. Further results on the problems encountered by the respondents when using the OPAC are the following: 42.7% said that the OPAC is complicated to use while 57.3% said that they do not encounter this problem; 40.2% said that the computer units dedicated to OPAC is very limited whereas 59.8% said that it is not a problem to them; 35.0% of the respondents said that the problem they encounter is the limited search result of the OPAC however 65.0% said that they do not encounter this problem; 24.7% answered that the search results of the OPAC are irrelevant while 75.3% stated that it is not a problem to them; 23.1% answered that the OPAC has inadequate access points or searchable terms whereas 76.9% said that they do not encounter this problem; 19.3% answered that the searching capability of the OPAC is slow while it is not a problem to the 80.7% respondents. Several studies also tried to find out the problems encountered by the users when using the OPAC. The study of Adenike and Akin (2014) revealed that out of 164 respondents, 102 claimed that their main problem was not enough computer systems for OPAC purposes. Findings also revealed in the study of Kumar and Vohra (2011) and Sankari et. al (2013) that the main problem of the respondents was their lack of knowledge in OPAC.

Summary of Findings

Generally, the students have low level of knowledge in using the Online Public Access Catalog, thus their frequency of use on OPAC affects their level of knowledge and satisfaction. Students who use the OPAC frequently have the tendency to have higher level of knowledge than those students who seldom use the OPAC. On the level of satisfaction, result shows that the students are slightly satisfied when using the OPAC hence their frequency of using it influences their level of satisfaction. Those who often use the OPAC tend to have a higher satisfactory level than those who rarely use OPAC. The students have encountered problems in using the OPAC especially when instructions are limited or not provided. Interestingly, there is a significant difference on the level of knowledge and satisfaction of the respondents when grouped according to sex, school and their frequency of use.

Conclusions and Recommendations

The respondents' low level of knowledge in the use of OPAC was because they are inattentive during the library orientation especially during the OPAC lecture. Moreover, their level of satisfaction in the use of OPAC is dependent on the internet connectivity. The respondents specified that the primary problem they encountered was the instructions on how to use OPAC which is not posted near the OPAC terminals. The instruction should include hands-on activities to elicit attention from the students/respondents. Since the students had low satisfaction in using the OPAC, the library must enhance the OPAC services to improve the delivery of information and meet the users need. Thus, the library must post instruction to all OPAC terminals to guide the respondents in the proper use of OPAC.

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