Perceived Problems on the Library Information Resources for Research among Graduate Students in Higher Education of Southern Mindanao, Philippines: It's Contribution to Academic Library Profiling

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Abstract:- This was conducted randomly to investigate perceived problems on the Library Information Resources for research among graduate students in higher education institutions of Southern Mindanao, Philippines and its contribution to academic library profiling. There were four research questions and three hypotheses used with 1000 copies of questionnaires administered to the respondents spotted in and out of school premises through face to face method. A simple random and stratified sampling procedure was used due to large number of the population. The frequency counts, simple percentages, mean, standard deviation and Pearson product moment correlation were used for the statistical analysis. Parameters of this study evolved only on the indicators that spell out the perceived problems like nature of awareness and usage of the availability of the information resources for research among graduate students in higher education institutions in southern Philippines where is resulted to high level. Meanwhile, the use of information resources among graduate students in higher education institutions resulted high level where textbook is the most used information resources for research. The following indicators revealed as the perceived problems such as insufficient current resources, derisory loaning period, continues power shortage and slow internet connection speed implied the challenges encountered in the use of information resources in the libraries. This study resolved that perceived problems could bounce difficulty to the students in doing research writings and become the reasons of their indolence in making necessary information sourcing prior to their research work which certainly leads to plagiarizing the previous writings completed by the former students. This study recommends academic libraries to be equipped and upgraded of new information materials as inspiration for the students in carrying out their imminent research work in the future.

Keywords:- Awareness, Use, Information resources, Research, Library Profiling.

I. INTRODUCTION

This study endures learning about Perceived Problems on The Library Information Resources for Research Among Graduate Students of Higher Education in Southern Mindanao, Philippines and it caters contribution to academic library profiling. At the same time, caters description of the information resources in the new scientific arena as presented in the cited literatures and readings. Information Resources are the materials that provide necessary information, contents and information services to the user. IR is an element of every organization that gives valuable and significant information including all relevant data generated and collected from human activities communicated directly to the user. In most recent trend of education, multidisciplinary information resources for study and research like government information, databases, literatures and images, journals and articles, maps, multimedia, newspapers, patents, streaming videos and music, theses and press contents in Information Resources as tandem in educational pursuit of all disciplines. Education in our modern world is coupled with the invention of new technologies which believe information resources is the life blood in any academic activity. These are in the form of printed and electronic materials available in the libraries and in the internet, which could be accessed manually and electronically anytime by the end-users. Information resources includes books, journals, theses and dissertations, technical reports, e-books, and all related materials either in print format or electronic gadgets in online access. According to Okki, electronic gadgets stores and provide information worldwide without any serious geographical barriers capable of satisfying the diverse information needs of researchers.

Every higher learning institution now requires students to conduct research, write notes, assignments, term papers, feasibility studies, empirical studies, reaction papers and other writing activities relative to their respective course requirements and do presentation as such they need information to concretize their ideas and claims. In essence, information resources help them communicate the knowledge about the event or given condition derived from observation, experimentation, experience, instruction or

study where academic libraries are performing gateways to information storage package of the world. Academic libraries as gateways to information, however, this in returns are being challenged todays because growing numbers of researchers are turning to googles although there are many latest research materials in the libraries provided for them. The fact for several decades, academic libraries played critically important roles in proving relative information supporting the research in all subjects and disciplines within their institutions where they are officially enrolled. College libraries as academic library are established with the primary goal of providing information to the students, staff and workers of the college community where one of its objectives is to develop and maintain collection of information resources in all formats like print and nonprint reading materials in a more available and accessible at all times.

A continuous interaction between information resources and the users promotes awareness of its services and activities which can be influenced both by factors directly related to the library such as how efficiently and effectively it operates, how relevance is the information it provides and the communication channel it employs. The learning process of the students or the researchers and their abilities to search and obtain information from the library could be enhanced by having extensive awareness of information provided in the library. According to Olubunmi et.al., library provides the needed materials, data, information and literatures for research. Further, research and the library are interrelated that are not mutually exclusive. Researchers should go to the library and converse substantially their research problems with the librarians before engaging on any research work. This process will help them to have a link with the relevant information resources available in the library. Good research could not be possible without library because library is the storage package of information relative to research. However, library is now used in different aspects, e.g. public libraries are now changing in dynamic context to digital library by helping researchers find the best source of information whether in book, a website or database entry. The Librarians Book of Lists (Chicago: ALA 2010) defines library is a collection of resources in a variety of formats organized by information professionals or experts who provide convenient physical, digital, bibliographical or intellectual access, offer services and programs in educating, informing variety of audiences and by stimulating individual learning and advancing society as a whole.

A. Significance of Study

This study is very significant to the incoming graduates, professors and faculty members in every higher learning institution in the southernmost part of the Philippines, advocators and catalyst who wish to be equipped of the important usage, nature and availability of information resources elsewhere including its perceived problems.

Accordingly, ancient and modern libraries depend on a variety of resources to provide researchers and patrons with best-in-class services where information resources mostly found. Information resources are the nerve and spirit of all research activities carried out by advocates, believers, promoters, academicians, scientists from individual to group in the organizations and learning institutions, Olubunmi, et.al. [20]. These resources contain reports of studies, inventions, development, investigations and discoveries that are being reported through researches all available and organized in the library. These serve as instruments containing information-base in all academic institutions and offer to both faculty and students in carrying out their researches Olubunmi, et.al. [20]. However, several observations have shown that students mostly repeat what has been written in by the students in the previous years. In other words, plagiarism is customarily recurring in the present students' researches undertaking.

In this regard, the researchers deem it more necessary to conduct this study by enthusiastically investigating the problems perceived using these pointers such as awareness, usage, and availability of information resources, the important challenges and the considerable solutions to the challenges encountered by the graduate students in Higher Education Institutions in Southern Philippines while using information resources for research.

B. Scope and Delimitation

This was delimited to graduate students in both public and private identified higher learning institutions in the southernmost part of the Philippines. 1000 copies of questionnaires were distributed to 1000 respondents. This was conducted in one academic year (2019). This study adapted questionnaires written by Olubunmi, et.al. [20] with slight modification to prove its claim to realize its prerogative.

C. Objectives of Study

This study aimed to:

- ➤ Determine the level of awareness on the availability of information resources among graduate students in higher education, Southern Philippines;
- ➤ Dissect evidence on the use of information resources among graduate students in higher education, Southern Philippines in terms of gender and degree program;
- Find out what are problems perceived by the graduate students in higher education, Southern Philippines, and
- Suggest solutions to the perceived problems in the use of information resources for research among graduate students in higher education, Southern Philippines.

D. Statement of the Problems

This study was an attempt to find answers to the following problems:

➤ What is the level of awareness of the availability of information resources for research among graduate students in higher education institutions in Southern Philippines?

- ➤ What is the level of use of information resources for research among graduate students in higher education institutions in Southern Philippines?
- ➤ What are the problems perceived in the use of information resources for research among graduate students in higher education institutions in Southern Philippines?
- ➤ What are the considerable suggested solutions to the perceived problems among graduate students in higher education institutions in Southern Philippines while using information resources for research?

E. Hypotheses

- ➤ HO1. There is no significant relationship between the availability and the level of use of information resources for research among graduate students in Higher Education Institutions of Southern Philippines.
- ➤ HO2. There is no significant relationship between the use of information resources for research and genders among graduate students in higher education institutions in southern Philippines.
- ➤ HO3. There is no significant relationship between the level of use of information resources for research and the degree program among graduate students in Higher Education Institutions of Southern Philippines.

F. Definition of Terms

To gain common understanding of this study, the following terms were operationally defined:

- ➤ Information Resources is basically referred to any material that provides information content and information services for the users and typically considered as an element of infrastructure that enables the transaction of certain selected significant, important and relevant data to provide content and information services that can be used directly by the end-users.
- ➤ **Graduate Students** generally those individuals who are pursuing formal academic endeavor in either master level after gaining baccalaureate degree and doctoral level after completion of their masters' degree.
- ➤ Awareness of IR pertaining to the continual interactions of students toward availability and usage of resources as influenced by factors related to the library such as the veracity of the relevance of information it provides and the communication channels it employs and how efficiently and effectively it engages.
- ➤ Research it pertains to a man's systematic and empirical investigation of existing but hidden elements in nature. It is a process of discovering, exploring, and studying phenomenon with a purpose of proving and disproving certainty of ideas, knowledge and theory by unearthing, restructuring explanation of such implausible phenomenon.

➤ **Library Profiling** – the process of installing all together the complete upgraded necessary reading and information components in the library to include skills in human and technology management.

II. REVIEW OF RELATED LITERATURE

A. Information Resources in the Library

Olubunmi, et.al. [20], mentioned constitute a range of materials and equipment gathered by the library to meet the information needs of both intended and anticipated users. Meanwhile, Asogwa, et.al., [5] as cited by Maidabino, et.al., [14] referred information resources as any information in electronic, audiovisual or physical form. This could be in the form of either hardware containing limited capacity or in software device which is sometimes referred to chip capable of storing huge volumes of information that can be retrieved for use anytime in the internet.

Amidu, et.al., [3] information resources in the library are journals, maps, proceedings, abstracts, textbooks, encyclopedia, dictionaries, gazettes, past examination question papers, government publication, technical reports, student projects, CD ROM etc. Accordingly, there is positive correlation between availability of information resources and the services provide to students as well as the quality of education being acquired.

In addition, Maidabino, et.al., [14] asserted that the provision of standard information resources in form of print and non-prints (such as books, journals, and audio-visual collection, e-books, e-journals, and services) will help academic libraries to attain their noble objective. In addition to this claim, libraries are now shifting to digital transactions due to growing electronics containing availability of information both in local and global networks and many libraries are now turning to provide access rather than building local collections which is contrasting phenomenon between earlier times where information resources mainly presented in paper formats while now information is generated in exponential rate.

Libraries have a critical role to play in successful research by providing a place for students and faculty to do their research, Kumar D. t.al., [13] cited by Oluwabiyi, et.al., [19]. Moreover, libraries play collection of information resources and reference services that help escalate knowledge and capability of the users in doing research and other academic related works.

The use of different types of library services shall be subjected to the following conditions: general references, books and materials like encyclopedia, dictionaries, atlases, etc. shall be for room use only. General references may be issued for classroom use upon the request of a faculty member or a teacher but must be returned within the day. Dissertations, theses, periodicals, journals, and other printed reading materials like flyers, leaflets, special collections such as rare books, personal papers of the Filipiniana and Achieves Sections, AV materials,

microforms, diskettes, art collections and Fine Arts shall be for room use only. Reserve books and reading materials for courses offered shall be lent for room use only and be recalled 2-3 hours after the issue. There are also books usually loaned for two weeks if these are borrowed for home use.

In the University of the Philippines College Libraries, the use of archival materials e.g. official record, personal papers, manuscript, diaries, legal papers, etc. imposed with particular records by the originating office or the donor as stipulated in the deed of donation.

Library resources are basically sources of information included mostly the books, journals, newspapers, periodicals, editorials and encyclopedia stored in traditional storage but digital sources of information becoming prevalent because of the advent of internet technology. Digital sources of information include but not limited to online libraries and journals, online encyclopedias, Wikipedia, blogs, video logs, YouTube, e-books, etc., Anthony [4].

Maidabino, et.al., [14] mentioned that movie clippings from history have played a large role in modern research and are classified under 'library resources.

Schweibish [8] also cited in addition to what Anthony [4] has mentioned library resources include DVDs, CDs, all types of programs for adults and children, concerts, quiet study spaces, maker spaces (think 3D printers), help for job seekers, help for senior citizens, tax preparation help and so much more. There was a table set up by the League of Women voters for voter registration where young people using trying out the virtual reality setup. These are all resources that are found in current public libraries.

Sayed [21] said one should not be confused of Library Resources with Library Services because the nature of services in the library are determined by the allocation of resources. There are many types of resources in a library, as: 1- Physical Resources (e.g. building, furniture, pieces of equipment, etc.), 2- Human Resources (e.g. staff of different categories of people required to run a library) and, 3- Intellectual resources (print materials, books, journals, magazines, newspapers, etc., non-print materials, multimedia materials, and e-resources, etc.). While there are many types of services in a library (e.g., training sessions, opening hours, help with citing sources, programs for adults and children, concerts, help for job seekers, help for senior citizens, tax preparation help and so much more).

Attam [6] there are many types of resources in a library. They may be described as Physical Resources (e.g. building, furniture, equipment etc.), Human Resources (e.g. staff of different categories or people required to run a library) and Intellectual resources (print materials, books, journals, magazines, newspapers etc., non-print materials, multimedia materials and e resources etc.). Major functions of a library may be described as to collect, to process and organize and to disseminate.

B. Awareness of Information Resources for Research.

According to Akpojotor [2] cited by Olubunmi, et.al. [20] awareness can be knowledge or perception of situation that is concern and well-informed about interest or familiarity in a particular situation. Therefore, awareness becomes paramount if students are to harness the resources that are available in the library.

Sejane [22] also cited awareness of the existing library resources is crucial in influencing the usage of the resources. When a user is aware of resources it would usually lead to greater use of the it. Usage of information is not only confined in the printed materials but others are stored in e-resources materials provided in the websites. However, according to Wijetunge [24] there are students not aware of the online public access catalogue and e-resources provided through the Webpages. Study conducted in resulted not high in terms of students' level of access, usage and awareness of electronic information resources at the University College Hospital (UCH) Ibadan.

A study also conducted by Namugera [15] in Makerere University Library, Uganda, East Africa reported rate of awareness of some library services was low yet usage of library and information services has a direct linkage to awareness of users. Roberts posited that lack of awareness was caused by poor communication and inadequate interaction between users and the library coupled with the library's failure to apply marketing strategies in promoting services. However, Ahmed et.al., [1] mentioned that awareness among the users about the availability of online journals was highly satisfactory in Indian Institute, Dubai International Academic City (DIAC) while Sejane [22] indicated that awareness of e-resources was mainly through formal engagement in library orientation and through information engagement such as colleagues and peers.

C. Uses of Information Resources in Research.

The measure of academic success in research productivity requires information resources through research process, the process of finding ideas, facts and new information by systematic study as cited by Olubunmi et.al., [20]. Information retrieval skills are crucial for retrieving information in this era of technology where majority is found in e-resources in the academic libraries and the ability to use e-resources efficiently depends on basic computer skills and knowledge of what is available and how to use it. According to Wejetunge [24] an effective use of electronic information sources for retrieving needed information will have a profound impact on the learning and quality of research output by the student. Bamigbove, et.la., [7] reported high percentage of students and faculty members are using e-journals and e-books for their studies, research works and teaching though they still use a variety of resources including print collections. A survey done by Liew, et.al., [13] students tend to use e-books and eresources because of its ability to link additional information in searching out current materials. There is an increasing trend in the use of internet as an information source. In a study carried out by Dilrukshi cited by

Wejetunge [24] reported 52% of fourth year undergraduates preferred online journal usage while the remaining 48% prefer printed materials. This is due to the absence of training in using online resources, lack of time to engage in searching, poor knowledge of online journal and insufficient computer facilities in the faculty access room.

Hussain, et.al., [6] found that books, newspapers and periodicals are the most used information resources by the users. Therefore, today's generation have transformed books and other information resources that are managed by libraries and information professionals into electronic platforms where information users are now becoming more perceptive and practical as well as sophisticated in their information needs. Users tend to ignore libraries and the services of the librarians and becoming vast in the use of search engines in quest to satisfy their information needs. In this information age, Wikipedia is an information source trending historical period in the Twenty-First (21st) century characterized by the rapid shift of traditional industry resulted from industrial revolution to an economy that is based on Information Communication Technology or ICT which is referred to a Computer Age, Digital Age or New Media Age. According to Nwalo [24] this is a period when information is expected to be delivered at the doorsteps of every human since all decisions and actions are information driven.

Oketunji [20] stated that libraries are facing many challenges and threats due to the internet and digital revolution and globalization. Today, library resources are being made available in a variety of digital formats and media filtering the right information. An online search access through Internet increases speeds and conserves time of users where information is just on a click of everyone's mice or device. This is what we call a paradigm shift or a revolutionary challenge, the challenges of new technologies that bring one's attention to adapt and innovate something for the libraries. Some calls it disruptive technologies that drove the transition from manual to electronic library that needs new service models. Consequently, there has to be innovation in the libraries and in the profession generally. Librarianship has to be strengthened to be relevant in the contemporary world, embrace the new technologies and integrate them into its engagements with communities. Innovative technologies are extremely important and indeed supports most of the new products, services and management that are introduced in the libraries. These are the demands in the libraries where all organizations have to meet in order to sustain their own existence, remain responsive and relevant to the demand of every new generation.

Olubunmi, et.al., [20] presents the following types of information resources such as: 1) Information flow – following a discovery or event, information flows through different publications over time. 2) Reference Material –

can consist of different types of material providing background information. this material can either be general or related to specific subject areas. 3) Dictionaries – use to define terms, subjects or topics. Use to determine the subject context of new topic to help with further searching. Dictionaries provide definitions of specialist terms, gives translation of the foreign languages into English or vis-àvis. 4) Encyclopedias - contains more details than dictionaries. It provides concise overview of the key aspects of the topic, review of the history of the topic, references to further information, bibliographical details of key figures. 5) Wikipedia – a well-known online encyclopedia that provides more information and references to other sources to check the factual content of the information depending on the subject area. 6) Other Reference Materials that are use for collection of numerical data in statistics, scientific data compilations, bibliographies which are collections of references on a subject. 7) Books or more detailed monographs in the schools or university level containing in-depth overview of a subject, a good grounding in a new discipline, comparison of differing and conflicting ideas, theories and opinions, facts and figures. 8) e-Books available in electronic formats or the exact copies of the print version. It contains additional features like videos, quizzes, self-learning test that can be downloaded onto hand held devises for more comfortable reading. However, only a part of an e-book can be printed due to copyright protected and reserved. 9) **Journals** – these are periodicals or serials published at regular intervals in a year generally represented by a volume number containing individual issue reflecting the frequency of its publication. Its contents basically include reports of the original research, literature reviews of current subjects of interest, news and comment on topical issues, and list of forth coming events. 10) **Journal articles** – typically the research papers. These are good source of references to other relevant literature. They are more up-to-date than books as publication is faster. These are assessed and evaluated by experts or usually peer review to ensure validity of the research and its conclusions. These are usually short, factual and contain precise research methods and results. 11) Websites – it is easy access and mostly up-to-date (but check the reliability of the information provided therein). These include various types of media with access to worldwide information. 12) Newspapers – this contains several important features like eyewitness accounts, currency or immediacy, opinions and comments on topical issues, editorials, contemporary culture, obituaries of famous people. Newspaper can be a good source of information for good research but its disadvantage is lack of accuracy checks or peer review, there is bias ingredient as it is written in political point of view, this is not usually written at an academic level. 13) include: Conference proceedings, Standards, Patents, Dissertations and Theses, Manuscripts and Special Collections, and Social Media.

III. METHODOLOGY

- ➤ Research Design. This study used was a descriptive survey design which allowed collecting and analyzing data from only a sample considered respondents representing the entire population.
- ➤ Population and Sampling Technique. The population comprises graduate students in any degree program who are registered users of the information resources found in the libraries. This employed a simple random and stratified sampling procedure. Thirty percent users (graduate students) were sampled from each degree program.
- ➤ **Instrument.** For data collection, a structured questionnaire entitled Awareness and Use of Library Information Resources for Research Questionnaire (AULIRRO) was used.
- ➤ Procedure of Data Collection. The researchers personally administered the constructed questionnaires

- and collected the data from individual respondents and conduct a personal individual interview. This workout lasted for two months.
- ➤ Data Analyses. The data generated were interpreted using percentages and frequencies; mean and standard deviation through Likert scaling of the responses where applicable.

IV. RESULTS AND DISCUSSION

Perceived Problems on The Library Information Resources for Research Among Graduate Students of Higher Education in Southern Mindanao, Philippines: Its Contribution to Academic Library Profiling.

A. Demographic Information of Respondents

Table 1 below shows 1000 graduate students were selected as sample for this study where 33% male while the remaining 67% female. This implies that there were more female respondents participated in this study than male.

GENDER	FREQUENCY	PERCENTAGE
Male	330	33.0
Female	670	67.0
Total	1000	100.0

Table 1:- Profile of Students based on Gender

Table 2 below shows 50% of the participants were graduate students who finished Non-Board or Non-Licensure required Degree program (Technical Education) and 50% were graduate students who gained Board or Licensure required Degree program. This result indicates that graduate students were selected equally from both programmes.

DEGREE PROGRAM	FREQUENCY	PERCENTAGE
Degree Course (with board or licensure eligibility required)		
	500	50.0
Degree (without board or licensure eligibility required)		
	500	50.0
Total	1000	100.0

Table 2:- Distribution of Graduate Students based on Programme

B. Answers to the Research Problems

Research Problem 1. What is the level of awareness of the availability of information resources for research among graduate students in higher education institutions in southern Philippines?

Table 3 below shows the level of awareness of the availability of information resources for research among graduate students in higher education institutions in southern Philippines. The table shows that the graduate students have response to the items on the table as follows: references books ($\tilde{N}=1.79$), internet facilities and online resources ($\tilde{N}=1.75$), textbook ($\tilde{N}=1.73$), dissertation / thesis

/ projects (\tilde{N} =1.69), journals (\tilde{N} =1.64), newspapers / magazines (\tilde{N} =1.65), map / charts / diagrams (\tilde{N} =1.52), library catalogue (\tilde{N} =1.71), indexes and abstracts (\tilde{N} =1.69), monographs (\tilde{N} =1.43) and online public access catalog (\tilde{N} =1.47) while conference proceeding/papers obtained the lowest mean score of (\tilde{N} =1.26). Basing from the value of the weighted average (1.61 out of 2.00 maximum value that can be obtained), which fall for decision value of high, it can be inferred that the level of awareness of the availability of information resources for research among graduate students of Higher Education Institutions in Southern Philippines is **high**.

No.	INFORMATION RESOURCES	M	Std.	Remark
1	Conference Proceedings/Papers	1.26	.43	low
2	Dissertation/Thesis/Projects	1.69	.28	high
3	Indexes and Abstracts	1.69	.37	high
4	Internet facilities and online resources	1.75	.36	high
5	Journals	1.64	.26	high
6	Library Catalogues	1.71	.33	high
7	Maps/Charts/Diagrams	1.52	.39	high
8	Monographs	1.43	.21	low
9	Newspapers/Magazines	1.65	.32	high
10	Online Public Access Catalog	1.47	.41	high
11	References	1.79	.30	high
12	Textbooks	1.73	.20	high
	Weighted Average	1.	61	High

Table 3:- Awareness of Information Resources for Research

Legend: N = No, Y = Yes 1.45-2.00 = High

Decision Value: 0.00-1.44 = Low

This finding relates correspondingly in agreement with Amad and Panda (2013) as cited by Olubunmi, et.al. [14] who discovered awareness on the availability of online journals among students in Indian Institute in Dubai International Academic City (DAIC) was found highly satisfactory found highly satisfactory. Relatively, Indian University mentioned and the Higher Learning Institutions in the Southern Philippines are both located in Asian continent.

Research Problem 2. What is the level of use of information resources for research among graduate students in Higher Education Institutions in Southern Philippines?

Table 4 below shows that the students in Higher Education Institutions in Southern Philippines fairly use the following: references which gained (\tilde{N} =3.15), internet facilities and online resources obtained a mean score of (\tilde{N} =3.37), the newspapers / magazines have (\tilde{N} =2.97) mean

score, library catalogue (\tilde{N} =2.45) and indexes and abstracts (\tilde{N} =2.57) and monographs (\tilde{N} =1.95) and online public access catalog (\tilde{N} =3.25). The table also shows that the students mostly used textbook (\tilde{N} =3.57) which obtained the highest mean score among items. This is line with Hussain and Kumar (2013), cited by Olubunmi, et.al. [14] who found out that books, newspapers and periodicals are frequently used by users for research.

Furthermore, table shows that the students rarely use the following: dissertation/thesis/projects (\tilde{N} =2.02), journals (\tilde{N} =2.00), conference proceeding /papers (\tilde{N} =1.14). Basing from the value of the weighted average (2.54 out of 4.00 maximum value that can be obtained), which fall for decision value of high, it can be inferred that graduate students in Higher Education Institutions in Southern Philippines showed high level of use of information resources for research.

No.	INFORMATION RESOURCES	M	Std.	Remark
1	Conference Proceedings/Papers	1.14	0.18	low
2	Dissertation/Thesis/Projects	2.02	1.03	average
3	Indexes and Abstracts	2.57	1.12	high
4	Internet facilities and online resources	3.37	1.20	high
5	Journals	2.00	0.15	average
6	Library Catalogues	2.45	1.18	high
7	Maps/Charts/Diagrams	2.05	0.23	average
8	Monographs	1.95	0.06	average
9	Newspapers/Magazines	2.97	1.11	high
10	Online Public Access Catalog	3.25	1.17	high
11	References	3.15	1.01	high
12	Textbooks	3.57	1.93	high
	Weighted Average		2.54	High

Table 4:- Level of Use of IR for Research

Legend:

NU = Not Used

RU = Rarely Used

FU = Fairly Used

MU = Mostly Used

Decision Value:

0.00-1.94 = Low

1.50-2.44 = Average

2.45-4.00 = High

Research Problem 3. What are the perceived problems in the use of information resources for research among graduate students in Higher Education Institutions in Southern Philippines?

Table 5 below shows the various perceived problems in the use of information resources for research among graduate students in Higher Education Institutions in Southern Philippines. The table shows that the students

indicate the following as the challenges encountered: lack of current resources($\tilde{N}=2.57$), inadequate resources ($\tilde{N}=2.79$), inadequate loaning period ($\tilde{N}=2.19$), constant power outage ($\tilde{N}=2.45$) and slow connection speed garnered the highest mean score of ($\tilde{N}=3.12$). The table also shows that the students disagreed to the following: inadequate library services ($\tilde{N}=2.19$), inadequate library space ($\tilde{N}=1.37$), inadequate library skill ($\tilde{N}=1.23$) and inadequate search skill ($\tilde{N}=1.21$).

No.	PERCEIVED			
	PROBLEMS	M	Std.	Remark
1	Constant Power Outage	2.45	1.12	agree
2	Inadequate Library Services	2.19	0.95	disagree
3	Inadequate Library Skills	1.23	0.98	disagree
4	Inadequate Library Space	1.37	1.30	disagree
5	Inadequate Loaning Period	2.55	2.19	agree
6	Inadequate Resources	2.79	2.01	agree
7	Inadequate Search Skills	1.21	0.84	disagree
8	Lack of current resources	2.57	1.17	agree
9	Slow Connection Speed	3.12	1.23	agree
	TOTAL	2.16	1.31	Disagree

Table 5:- Perceived Problems in the Use of Information Resources

Legend:

SD = Strongly Disagree Decision Value for Remark:

 $\begin{array}{lll} D & = Disagree & Agree = 2.45\text{-}4.00 \\ A & = Agree & Disagree = 0.00\text{-}2.44 \end{array}$

SA = Strongly Agree

Research Question 4: What are the considerable suggested solutions to the perceived problems in using information resources for research among graduate students in Higher Education Institutions of Southern Philippines?

Table 6 above is showing the various suggested solutions to the perceived problems encountered by the graduate students in Higher Education Institutions of Southern Philippines while using information resources for their researches. The table shows that the students agreed on all the Considerable suggested solutions in table 6 as follows: adequate resources should be provided (\tilde{N} =1.53), alternative power supply be devised (\tilde{N} =1.65), current resources should be acquired (\tilde{N} =1.67), improvement on internet connectivity (\tilde{N} =1.49), library orientation should

be well carried out (\tilde{N} =1.93), library services should be improved (\tilde{N} =1.82), new library building should be built (\tilde{N} =1.58), loaning period should be extended (\tilde{N} =1.46), and training on internet skill should be organized (\tilde{N} =1.87).

This result corroborates the finding of Oluwabiyi, et.al., [13] cited by Olubunmi, et.al. [14] that there is a need to update print collections with latest books and journals in the Kenneth Dike Library, University of Ibadan so that students could get the newest information for their research. Further cited from qualitative point of view, students mentioned during interview that each school to have at least rehabilitate necessary internet connectivity to lessen their problems in any research activities.

No.	CONSIDERABLE SUGGESTED SOLUTIONS	M	Std.	Remark
1	Adequate Resources should be provided	1.53	0.30	agree
2	Alternative power supply should be devised	1.65	0.35	agree
3	Current resources should be acquired	1.67	0.14	agree
4	Improvement on internet connectivity	1.49	0.28	agree
5	Library orientation should be well carried out	1.93	0.30	agree
6	Library Services should be improved	1.82	0.21	agree
7	Loaning period should be extended	1.64	0.47	agree
8	New Library Building should be built	1.57	0.49	agree
9	Training on internet skill should be organized	1.87	0.36	agree
	Total	1.69		Agree

Table 6:- Solutions to the perceive problems in the use of Information Resources

Legend:

SD = Strongly disagree

D = Disagree A = Agree

SA = Strongly agree

Decision Value for Remark:

Disagree = 0.00-1.44Agree = 1.45-2.00

C. Test of the Hypotheses

Ho1: there is no significant relationship between the availability and the level of use of information resources for research among graduate students in Higher Education Institutions of Southern Philippines.

Table 7 below shows the availability and the level of use of information resources for research among graduate students in Higher Education Institutions of Southern Philippines where there is significant relationship existed between information resources availability and the level of their use at (r = .193; p < 0.05). Therefore, hypothesis 1 is rejected.

ARIABLES	Mean	Sd	N	r	Sig.	Remarks
Availability of Information Resources	21.29	2.72	1000	0.193	.036	Significant
Level of Use of Information Resources	37.71	8.13				

Table 7:- Pearson Product Moment Correlation showing the relationship between the availability and the level of use of Information Resources.

Ho2: There is no significant relationship between the use of information resources for research among graduate students of Higher Education Institutions in Southern Philippines in terms of gender.

Table 8 below shows the relationship between the use of information resources and gender of graduate students. The table shows that mean score of male students is 43.56 while that of female is 43.93. These mean values reveal no appreciable difference. Therefore, there is no significant relationship between the use of information resources for research and gender of graduate students (df = 96; t = -.509; p > 0.05). Hence, hypothesis 2 is accepted.

Use of Information Resources	Gender	No.	Mean	Std. D.	Df	Т	Sig (P)	Remarks
	Male	470	43.56	9.10	96	509	.758	Not
	Female	530	43.93	9.03				Significant

Table 8:- Summary of T-test showing relationship between the use of information resources and gender of the respondents

Ho3. There is no significant relationship between the level of use of information resources for research and the degree program among graduate students in Higher Education Institutions of Southern Philippines. Table 9 below shows the relationship between the level of use of information resources for research and the degree program among graduate students in Higher Education Institutions of Southern Philippines where graduate students on degree program with board examination programme obtained a mean score of 42.86 while graduate students on degree programme without board examination garnered 41.94 mean score. Its (df = 98; t = 1.713; p > 0.05) values reveal no significant difference. Therefore, the null hypothesis stated "There is no

significant relationship between the level of use of information resources for research and the degree program among graduate students in Higher Education Institutions of Southern Philippines is accepted.

	Degree Program	N	Mean	Std.D.	Df	T	Sig(P)	Remarks
Use of	Degree with Board Exam	500	42.86	8.59	98	1.713	.127	Not
information	Degree without Board Exam	500	41.94	8.19				Significant
resources	_							

Table 9:- Summary of T-test showing relationship between Information Resources use and Degree Programme

V. SUMMARY

This study was carried to find out perceived problems on the level of use and nature of the availability of information resources for research among graduate students in Higher Education Institutions of Southern Mindanao, Philippines: its contribution to academic library profiling. This carried one thousand copies of modified questionnaires distribution to 1000 respondents in one academic year (2019). Respondents were categorized according to their gender and degree program they are possessing. The result inferred nature of awareness on availability of information resources for research is high. The level of use of information resources for research among graduate students in Higher Education Institutions of Southern Philippines is high. Although there were perceived problems encountered by the students but from qualitative point of view, students mentioned each school to have at least rehabilitate necessary internet connectivity to lessen their problems in any research activities.

VI. CONCLUSION

It was concluded regardless of what gender and degree program those graduate students possessed have encountered problems in the process of sourcing out information for their researches and academic works due to insufficiency and lack of current resources, inadequate resources, inadequate loaning period, constant power outage and slow connection speed. According to Olubiyo et.al [18] these probably be the reasons indolence of students to do necessary information sourcing before embarking on their projects and academic assignments which definitely leads to plagiarism. Further, concluded that there is inadequacy in their library in any of the following resources like alternative power, acquisition of the library on current resources, slow internet connectivity, less library orientation, not as much of library services, conduciveness in the library building, limited loaning period and limited training on internet skill.

For the academic library profiling, it must be noted adamantly by the planners, leaders, administrators and advocates that the success and failure of any organization is mostly depending on the leadership of such organization where library is not exempted.

According to Ifidon, et.al., [11] Leaders of libraries have the greater responsibility to blend the resources in the libraries and ensure their efficient use for the accomplishment of the objectives of library. Leaders of libraries have the prime responsibility to blend the library's

resources and ensure their efficient use for the accomplishment of the library's objectives.

One of the components of the library is the human resources that must be blended by the heads of libraries. Leadership and management are important to the success of libraries in today's challenging global environment. So that, library planning and profiling must be wrapped by principles of leadership and succession planning as tools to be used in sustaining its integrity in addressing necessities of the end-users.

RECOMMENDATION

This study recommends the following in line with the findings:

- Academic libraries should be stocked with the newest information materials to inspire students and researchers to carry out their research work and other academic writings.
- ➤ Training on internet exploitation should be organized by the library for the final year students to assist them in their project work
- ➤ Librarians should make their services accessible to students in terms of assisting them to get relevant materials for their research work.
- ➤ Through Library Instruction Programme more awareness should be created on the importance of library in research activities among students.
- Alternative power supply (e.g. Solar energy) should be built that can provide electricity power to the library for at least 6 hours a day.

REFERENCES

- [1]. Ahmad, M. & Panda, K.C. (2013). Awareness and use of electronic information resources by the faculty members of Indian institutes in Dubai international academic city (diac): A survey. International Research Journal of Computer Science and Information Systems (IRJCSIS) 2(1), 8-17. Retrieved from: http://www.interes.journals.org/IR JCSIS.
- [2]. Akpojotor, L.O. (2016). Awareness and usage of electronic information resources among postgraduate students of library and information science in Southern Nigeria. Library Philosophy and Practice (e-journal). Retrieved from: http://digital.commons.unl.edulibphilprac/1408
- [3]. Amidu, G. & Akolo, S.D. (2015). Availability and use of information resources and services by students in Nasarawa State College of Agriculture Library, Lafia. Jewel journal of Librarianship.

- [4]. Anthony A. Alaribe, Aniekan-Augusta O. Eyo, Ambrose A. A. Alaribe Evaluation of a Software Enhanced Mobile Phone Based Microscope as a Teaching Tool, International Journal of Scientific & Engineering Research Volume 9, Issue 6, June-2018 211 ISSN 2229-5518
- [5]. Asogwa, Brendan Eze and Asogwa, Martha Nkiruka, "Information and Communication Technologies and Igbo Studies in Tertiary Institutions in Nigeria: Issues and Challenges" (2014). Library Philosophy and Practice (e-journal). 1189.http://digitalcommons.unl.edu/libphilprac/1189.
- [6]. Attam Parkash Gakhar, 2016. ILA Newsletter: Library Quote: "Bad libraries build collections, good libraries build services, and great libraries build communities" Office of the Indian Library Association A/40-41, Flat No.201 Ansal Buildings, Dr. Mukherjee Nagar, Delhi-110009. Volume No. 32; Issue No. 8; August, 2016. ISSN: 0971-0531.
- [7]. Bamigboye, O.B., Owolabi, K.A. & George, A.E. (2011). Use of electronic resources by staff and students of University of Agriculture, Abeokuta, Nigeria. Tin-City Journal of Library, Archival and Information Science. 2 (1). 14-19.
- [8]. Bitagi, A.M. & Garba, S.K. (2014). Evaluative study of information resources and services utilization for research in academic libraries in Niger State, Nigeria. IMPACT: International Journal of Research in Business Management (IMPACT: IJRBM) 2 (5).
- [9]. Hossam Ali-Hassan 2019. Glendon College, York University, Toronto, CANADA Internet non-use among the Canadian older adult population: General Social Survey (GSS).
- [10]. Hussain A. & Kumar, K. (2013). Utilization of Information Resources and Services of the Master School of Management Library: A Study. Available at: https://www.research.gate.net/publication
- [11]. Ifidon, S,E and Ifidon, E.I.(2007) New Directions in African Library Management. Ibadan: Spectrum Books.
- [12]. John MacRitchie (2019) The Librarian's Book of Lists. By George M. Eberhart. Chicago: American Library Association, 2010. 118 pp. soft cover ISBN9780838910634, The Australian Library Journal, 60:2, 180-180: https://doi.org/10.1080/00049670.2011.10722604.
- [13]. Kumar, D. & Singh, R. (2009). Information resources and services of national science library India, New Delhi: A user study. International Journal of Library and Information Science. 1(2) 017-021. Retrieved from: http://www.academic journals.org/ijlis.
- [14]. Maidabino, A.A. & Ladan, A. (2015). Library carnival as a strategy for promoting university library services in Nigeria: A model of what to do and how to do it. Jewel Journal of Librarianship.
- [15]. Namugera, L. (2014). Users' awareness, perceptions and usage of Makerere library services in the main and selected branch libraries. Qualitative and Quantitative Methods in Libraries (QQML) 3. 741 758.

- [16]. Nwabueze A., Anyira I.E., Ivwighreghweta, O & Onoriode, O.K. (2010). The Role and Responsibility of the Library in Consolidating Research in Nigerian Private Universities: A Case Study of Western Delta University, Oghara, Delta State. Library philosophy and practice. Retrieved from: http://www.webpages.uidaho.edu/mbolin.
- [17]. Okiki, O.C. (2013). Availability of Information Resources for Research Output: Perception of Academic Staff Members in Nigerian Federal Universities. International Journal of Computer Science and Telecommunications 4(8).
- [18]. Olubiyo, P.O., Jato, M., & Ogunniyi, S.O. (2011). An assessment of the use of reference resources in University of Ilorin library, Nigeria. Tin-City Journal of Library, Archival and Information Science. 2 (1). 42-46.
- [19]. Oluwabiyi, M. & Adeyemi, B.M. (2013). Scholarly use of information for research by postgraduate students: The role of Kenneth Dike Library (KDL). International Journal of Library and Information Science. Retrieved from: http://www.academicjournals.org/IJLIS.
- [20]. Peter Olubunmi and Ogunniyi, Samuel Oke, "Awareness and use of information resources for research by final year students in Adeyemi College of Education, Ondo." (2017). Library Philosophy and Practice (e-journal). 1666. https://digital.commons.unl.edu/libphilprac/166
- [21]. Sayed Darwish 2019, The Impact of the New Web 2.0 Technologies in Communication, Development, and Revolutions of Societies https://www.researchgate.net/publication/268185930 © 2008-2020 ResearchGate GmbH. All rights reserved.
- [22]. Sejane L. (2017). Access to and use of electronic information resources in the academic libraries of the Lesotho library consortium. A Thesis submitted in fulfillment of the requirements for the degree of Doctor of Philosophy in the Information Studies Programme, School of Social Sciences, College of Humanities, University of KwaZulu-Natal, Pietermaritzburg, South Africa.
- [23]. Tyagi, S. (2011). Use and Awareness of Electronic Information Sources at IIT Roorkee, India: A Case Study. LIS.it. 2 (1).
- [24]. Wijetunge, P. (2015). Information resources usage by the agriculture undergraduates of University of Peradeniya, Sri Lanka. Annals of Library and Information Studies. 62. 7783.