2.0 Introduction

An attempt has been made in this chapter to review the important findings of the previous studies related to the topic. A retrospective search of literature was made on LISA, LISTA, and www.emeraldinsight.com. The related literature was retrieved and the review is described.

2.1 Review of Literature:

2.1.1 Worldwide:

2.1.1.1 Academic Library Resources:

Gorny, Artur and Piotr (1999) reports the results of a survey rating the amount and degree of the utilization of printed materials in polish academic libraries, with an emphasis on users’ attitude towards the library collection. Sulemani (2007) reports on a survey of use of, electronic databases (CD-ROM and online) including full text journals and their effect on information seeking behavior of health sciences faculty at the College of Health Sciences of the University of Ghana Medical School. Result shows lack of faculty awareness of electronic databases.

Baro (2011) presents the results of a study carried out to find out whether the undergraduate students of a health science institute are aware of and fully utilize the medical databases and other online information resources, based on a case of College of Health Sciences in Delta State University. The results revealed that majority of the students are not aware and do not use the online information resources. Bravo, Diez, Almuzara and Suarez (2008) examined the use of electronic journals in six academic libraries of the northwestern Spain during the first few years of subscription, from 2002 to 2005. Yu (2003) based on a survey of users in college and technical university libraries in Taiwan explores the methodologies to familiarize users with library facilities and information resources.
2.1.1.2 University Library Resources:

Onadiran and Onadiran (1986) examine student opinion of Ahmadu Bello University Library, Nigeria, on various aspects: frequency of visit and reasons for using the library resources. Lilly (1991) presents the results of a survey conducted at Kent state University identified the attitude of students towards mutilation and mutilated books and periodicals. Ajala’s (1997) survey of students on the use of university library resources in Ibadan, Nigeria, found that many students use other libraries for material not available in the university library. Abareh (2001) reports of a study conducted to minimize the menace of theft, loss and mutilation in a university library in Nigeria. Oyewusi and Oyeboade (2009) discuss the accessibility and use of library resources by undergraduate students in Ladoke Akintola University of technology (LAUTECH) in Ogbomoso, Nigeria. Salaam (2010) reports a study carried out at the University of Agriculture Abeokuta, Nigeria to find out students’ perception and attitudes to vandalism in the library. The results are largely regarded as a form of academic self-survival strategy of students. A study was conducted by the Reference Use Study Group of the University of Toledo’s William S. Carlson Library (1998) to identify how faculty used the reference collection, as well as their reasons for using it. A survey of health professionals (2004) of three teaching faculties of Kuwait University conducted to find out the nature and extent of use and the reasons for low use of resources revealed that time constraints, lack of awareness, and low skill levels were among the primary constraints they experienced.

Adika (2003) observes that in spite of the benefits of the Internet, its use among faculty is still very low. Elhafiz (2004) reports findings from a Survey Conducted to Measure the Use and Perception of the United Arab Emirates University (UAEU) Faculty Members of Electronic resources. Al-Ansari (2006) investigates the patterns of Internet use by the faculty including purposes for use, Internet resources that they use, and the problems faced while using the Internet.

2.1.1.3 Electronic Resources

Ray’s (1998) study investigated students’ views of electronic information resources. Bulychova (2002) describes the resources of Scientific Electronic Library, of Russia Condic’s (2004) survey of education students at Oakland University revealed that they were more likely to prefer purchase of electronic formats, and those who had previous library instruction are more likely to use electronic journals. Dadzie (2005) investigates the use of
electronic resources by students and faculty of Ashesi University, Ghana. The results indicate that usages of some Internet resources were also very high, whilst the use of scholarly databases was quite low. The low patronage was attributed due to unawareness.

Ismail (2005) focuses on identifying the usage pattern of e-books by undergraduates at the Faculty of Computer Science and Information Technology (FCSIT), University of Malaya (UM), Kuala Lumpur the University of Malaya library. Asemi, Riyahinia (2007) investigates the relationships between awareness and use of digital resources among students in Isfahan University of Medical Sciences. The results showed that students had less use of offline databases, due to infrequent periodic orientation and lack of education on use of offline databases. Levine-clark (2007) identifies levels of awareness and patterns of usage of electronic books by scholars in the humanities of University of Denver. Wu (2008) investigates graduate student’s perceptions of electronic resources, their search behaviour, and their usage patterns, in a research-oriented university. Grudzien and Casey (2008) assess the usage of e-books by off-campus students at Central Michigan University (CMU). Pattuelli (2010) investigates the use of a popular portable e-reader device, the Kindle 2, among library and information science (LIS) students and its effects on individual reading practices and the potential applications for library services.

Arif (2011) explores students' attitude towards the use of electronic resources (ER) in the libraries of three public sector universities Islamabad, Pakistan, i.e. Allama Iqbal Open University (AIUO), International Islamic University, Islamabad (IIUI) and Quid-e-Azam University (QU). Bamigboye and Agboola (2011) present a case study which found that many students and staff of University of Ibadan felt there were not enough computer libraries as compared to University of Lagos in Southwest Nigeria. Bassi and Emmanuel (2011) examines differences between male and female users of electronic resources in university libraries in Nigeria and found that there is a statistical difference between male and female use of electronic resources. Aderibigbe and Emmanuel (2012) reports usage of university library information technology (IT) resources by graduate students at the University of Agriculture, Abeokuta in Nigeria. The results indicate that most of the students are aware and use IT resources for their studies.

Elhafiz (2004) report’s findings from a survey conducted to measure the use and perception of the United Arab Emirates University (UAEU) Faculty Members of Electronic
resources. **Fabrizia** (2005) finds out what influence the approach adopted by the library may have on the use of e-journals. **Woods** (2008) describes measures taken to understand user needs, promote electronic resources, and evaluate strengths and weaknesses of the collection and marketing. **Abdullah and Gibb** (2008) presents the second part of three inter-related studies investigating the use and usability of e-books in higher education based on experiments conducted at the University of Strathclyde. **Bravo, Diez, Almuzara and Suarez** (2008) article studies the use of electronic journals in six academic libraries of the northwestern Spain during the first few years of subscription, 2002–2005. **Shelburne** (2009) presents the results of a large scale survey on the usage patterns and library patron attitudes toward e-books. The survey reveals a university community's discovery and knowledge of e-books. **Min** (2010) reports five campus-wide user surveys of e-resources at Tsinghua University Library, Beijing. **Kimball, Ives and Jackson** (2010) compares usage figures between equivalent e-books and print books owned by the Texas A and M university libraries in the physical sciences and technology. **Hepu** (2010) explores the pattern and trend of accessing and using electronic resources in an Australian university library in Australia. The study reveals that the usage of electronic resources is very much dependent on the user and the purposes of using electronic resources. **Zha** (2012) explores the exact nature of patrons’ usage behavior as well as their perception of ease of use and usefulness of print and electronic resources in the context of Chinese university libraries. **Okorie and Agboola** (2012) present the results of a study on the use of electronic resources at the libraries of the University of Agriculture in Abeokuta, Nigeria.

**Banks** (1996) reports the student’s use of the reserve collection of Kent Library at Southeast Missouri State University following the automation of the reserve system. Another study was undertaken at Oakland University (2001) to determine how well students mastered the retrieval process for print and full-text articles, and to gather their opinions on the value of both formats. **Adomi, and Iwhiwhu** (2004) surveys the users’ levels of satisfaction with reserve collection services at Delta State University Library, Abraka, Nigeria. **Kramer** (2005) notices that most potential users were not aware of the Indiana University-Purdue University Indianapolis image collection and had some difficulty in locating it, but when introduced to it, find it the useful for research, instruction, publication, or class work. **Ukpebor** (2012) discusses the use of electronic resources and information and communication technology (ICT) in African university libraries, particularly in Nigeria.
2.1.1.4 Facilities/University Library

Burke, Beranek, Waltn and Stubbings (2008) describe a collaborative study at two universities, one in Australia and the other in the UK, understand the factors that influence a student's choice of location when using computing facilities, what applications they use, and how adequate various services and facilities provided by the two universities were. Owolabi and Salaam (2011) based on a survey of catalogue use by engineering students in Nigerian universities libraries; found that library use instruction should enhance its usability.

Haka and Hensley (2003) discusses the evaluation of facility use in member libraries maintained by the Association of Research Libraries. Ajala and Aderinto (2011) examine use of the card catalogue by staff, undergraduate and postgraduate students of Ladoke Akintola University of Technology, Ogbomoso, Oyo state, Nigeria. Results established that the library card catalogue was underutilized by the undergraduate students, but more heavily used by postgraduate students, academic staff and administrative staff.

2.1.1.5 E-Facilities:

University research libraries in the United States and Canada were surveyed to determine their use of a variety of electronic reference tools. Results show that CD-ROM, remote online, locally loaded databases, and Internet were regularly used. It was also found that Internet access did not replace any other electronic reference service, but was added to existing services (1995). A study conducted at Oakland University Library on the acceptance of online public access catalog (OPAC), by students indicate that users overwhelmingly prefer OPAC and find it easy to use; however, they report some difficulty in using special features such as truncation (2000). Oduwole and Akpati (2003) examine the accessibility and retrieval of electronic information in the Nigerian University of Agriculture Library. It reveals that non-final year undergraduates use mainly the automated library catalogue (OPAC) while final year postgraduate students and academic staff as well regularly use bibliographic database tools such as TEEAL and CAB abstracts. Morupisi (2006) aims at assessing the use of the online public access catalogue (OPAC) by students doing sociology courses at the University of Botswana. Maidul Islam (2008) assesses Dhaka University students' perceptions of ease-of-use and their satisfaction with University Library's online public access catalogue (DUL OPAC). Nwagwu (2009) examines the factors influencing the use of Internet by students of the University of Ibadan, Nigeria, and establishes the variations of the use by students' personal characteristics. Ani (2010) investigates the extent and level of
internet access and use by undergraduate students in three Nigerian universities: University of Calabar, Calabar; University of Uyo, Uyo, and Rivers State University of Science and Technology, Port Harcourt as well as the electronic resources. The findings of the study reveal that the internet is extensively used by undergraduate students.

Ashoor (1987) presents the results of a survey of user reactions to the online catalog at the University of Petroleum and Minerals Library in Dhahran, Saudi Arabia. Kaminer (1997) explores the possible relationship between Internet usage and several dependent variables: computer usage (length of time and perceived expertise), length of time of Internet use, perceived expertise of Internet use, and perceived utility of the Internet. Nwezeh (2010) based on a descriptive of survey students and academic staff from Obafemi Awlowo University (OAU), reveals that a majority of the surveyed academic staff and the students found the Internet to be very useful. Telia (2012)] focuses on the results of a research on attitude of students of University of Ilorin, Nigeria towards computer based test (CBT). It was found that respondents showed positive attitude towards CBT and preferred CBT over pencil tests.
2.1.1.6 Academic Library Services

Chmelir (2005) examines the user’s attitude towards ILL by analyzing transaction data over a four-year period in a Consortium of six Academic Libraries in Washington State. The study found Patron-initiated borrowing is an effective method for resource sharing though traditional ILL remains a necessary alternative.

2.1.1.7 University Library Services

Roberts (1995) analyze the faculty knowledge about library services at the University of the West Indies. The findings reveal that on average the faculty was aware of only forty-seven per cent of the services and that they were least aware of those services, which required direct communication between the librarians and themselves. It was also found that the level of awareness was influenced by such variables as academic status and the frequency of consultations with the librarians. Arkin (1998) reports the experimental study conducted at Aalborg University Library that has offered subsidized unmediated ordering to faculty and employees to place their own ILL via UnCover.

Slovenia and Moss (1980) report student user opinion of the new university Arts and Social Studies Library. Widdows (1991) describes use of Purdue University library to determine student user perceptions of and attitudes toward the library system. Myer and Porritt (2005) evaluates whether students used the library and information services at the University of Teesside and, if not, what were the reasons for them seeking other sources of information. It was found that staff placed a higher value on access to the University LRC than the students. Riahinia and Azimi (2008) examine the use of the Internet among the females of Tarbiat Moalem University (TMU) in Tehran. Wang (2000) identifies students’ attitudes towards library instruction classes with a view to improving library instruction in future and to advocating for an integration of library instruction into the general education process.

2.1.1.8 General Services

Herberts (1984) study describes two surveys carried out to measure and evaluate the users of the Public Documents and Maps Department of the Duke University Library, department's reference service. The results indicate that many users have an inadequate knowledge of government documents, and respond favorably to instruction by librarians in the use of the department's reference tools and sources. Montgomery (1985) investigated the need for a rapid document delivery service within the Pittsburgh University Library System.
Goon and Aris (1988) based on a survey obtained feedback from users to lay guidelines for providing quality services in Malaysia. Harwood and Bydder (1998) study designed to measure the gap between users' expectations of service quality and actual delivery of service quality. The result found low expectations of library staff; Level and range of analysis; Comparison of response between part-time and graduate students. Jackson (2002) based on a survey of users examines whether libraries have changed their services in response to user attitude particularly reference services and found that libraries are responding to the users needs. Xu and Pang (2003) examines document request patterns at the Gateway Service Center of the Chinese Academic Journal Publications at a research university library and evaluates the effectiveness of the service. Wiley (2004) reports users' attitude towards lending and borrowing operations in the context of licensing, including ILL. Adomi (2004) based on a survey of users' assesses levels of satisfaction with reserve collection services at Delta State University Library, Abraka, Nigeria. The dimensions of users' (undergraduates, graduate students and faculty members) evaluation of university library service were provided by Satoh, Nagata, Kytomaki and Gerrard (2005) using focus group interview. Reid (2005) based on Interlibrary Loan Services in Victoria University of Wellington New Zealand identifies the trends in inter-loan in New Zealand. Waterford Institute of Technology, Library Ireland (2005) conducts comprehensive user surveys regularly to analyze the results to inform service delivery. Preston and Felice (2006) based on a survey of users of University of Malta Library, reveal that the library users were bypassing the library services and seeking information elsewhere, as their demands for the product were greater than the availability of existing information resources to meet. Nilsen (2006) compares user perspectives on visits to in-person and virtual reference services conducted by participants in the Library Visit Study, showed that virtual reference results in lower satisfaction than in-person reference.

Lockyer, Creaser, and Davies (2006) reports the results of an online survey of users of the IBSS were combined with hands-on sessions with novice users of the system at three UK universities that finds the demand for full text links and the advantage of some user training were features of both parts of the study. Chrzastowski and Joseph (2006) reports the program established by University of Illinois at Urban-Campaign (UIUC) to create a regular rotation of patron survey. This program is an effort to answer basic questions about attitude towards the library services, facilities and collection. At Penn State, (2006) a "Tell Us What You Think" user feedback button on the Libraries home page provided a convenient
mechanism for users to respond to system migration and the changes they saw in The CAT, the library catalog. **Bamigboye** (2007) present an evaluation of library services delivery in Olabisi Onabanjo University, Ago-Iwoye, Nigeria. **Nejati** (2008) sources and the use of library services at Michael Okpara University of Agriculture in Umuahia, Abia State, Nigeria. **Ahmed and Shoeb** (2009) examine the Service Quality of Dhaka University Library (DUL), Bangladesh, from its Users' viewpoint. **Mashroofa** (2010) evaluates the information services based on social science journals in university libraries of Sri Lanka. Results show that university library staff is prompt and helpful in delivering most of the services to their users. **Klaib** (2011) reports on library orientation programme conducted in 2008 at Zarqa Private University Jordan revealed that the offered programme had focused more on theoretical rather than the practical aspects. **Shoeb** (2011) investigate the overall service quality of the library system of Independent University, Bangladesh. A survey is conducted among the library users specifically faculty, graduate, and undergraduate students. **Du and Evans** (2011) investigate the use of a university library academic service to assist in research information seeking, and the role and value of the academic services in support of research from the viewpoints of both academic users and librarians. Findings include library online databases and interlibrary loans and document delivery as the services most familiar to, and utilised by, academic users. **Citti, Politi, Sabattini and Semenzato** (2012) carried out two surveys about users’ satisfaction, in order to improve services. The paper has double approach; quantitative and qualitative. Moreover, during the same week of the survey a focus group is carried out, to focus on the critical areas of the questionnaire and offer support for action. **Hossain and Islam** (2012) measures perceived service quality (PSQ) associated with user satisfaction of Dhaka University Library (DUL) and identified different problematic areas of DU library services.
2.1.1.9 University Library E-Services

de Vincente, Crawford and Clink (2004)] reports on the use of electronic information services by staff at GCU. The freely available Internet was the most widely used and appropriate source. Less than one third of staff used the catalogue to find EIS, which raises questions about the future of the catalogue as a free-standing comprehensive resource. Non-use of EIS was rarely due to difficulty of access or use. Staff was pessimistic about their student's skill levels in using EIS. Adeyinka (2009) examines the attitudinal correlates of some selected Nigerian Librarian towards the use and application of ICT in their various libraries. Ramlogan (2006) discusses on the use/non-use of selected, subscribed electronic information services (EIS) among full time Third year undergraduates at the St. Augustine Campus of the University of the West Indies, of Trinidad and Tobago. It is found that over half of the total respondents had not accessed any of the EIS. It is also found that undergraduates make infrequent or no use at all of certain EIS largely from lack of awareness. Ndinoshiho (2010) based on masters, dissertation submitted to the University of Cape Town, investigated the use of electronic information services (EIS) by undergraduate nursing students at the University of Namibia’s northern campus.

Rogani (2007) focuses on the findings of a user satisfaction survey at the University of Calabria with the digital collection service (Emeroteca Virtuale) provided by CIBER, a national consortium of university libraries. Xiao (2008) study based on services provided to users, department of chemistry at the science and engineering (S&E) library of University of Southern California (USC), and various new technologies applied as outreach approaches. Park (2010) explores the usage of a Social Networking Site by different university users. Mirza and Mahmood (2012) evaluate the effectiveness of electronic resources and services in Pakistani university libraries on the basis of users’ satisfaction.

2.1.1.9.1 University Library Specific Services

Karim, Darus, and Hussin (2006) explores the utilization of mobile phone services by university students in library and information services. The respondents' perceptions on the application of wireless hand services in the context of library and information services were found to be very positive. A high majority of the respondents indicated their willingness to become the users of such services if offered. Burns and Hasty (1975) based on a survey of users attitude towards services offered by Colorado State University Library found that large volume of data can be studied and used in other large university libraries for opening
hours policy staffing. Binding policies. Jacobs (1996) describes quantitative and qualitative research undertaken at the University of Sussex Library to investigate the behavior and motivations that led Library users to give puzzling responses in a user survey into book availability.

McCord and Nofsinger (2002) compare the results of three surveys, which were conducted at Washington State University Libraries to find out users attitude towards LibQUAL+TM. Hsieh and Holden (2008) report on a study of an academic library's wireless laptop lending service provided at Monmouth University Library found low usage level of the Laptop Lending Service (LLS). Survey of 614 users (2011) of the University of Colombo Library system using a modified version of SERVQUAL was carried out to ascertain the views of library users about the service level. They were asked to assess the actual service delivered by the library; to establish the importance of the service to them as users; and, to identify to what extent the service met their expectations. Finds that the service quality of the University of Colombo Library System was represented by seven dimensions and the best predictor of the overall service quality was the dimension referred to as "Collection and Access". Pedramnia, Modiramani and Ghavami (2012) aim to provide quality assessment of services provided by the MUMS libraries and determining member satisfaction and expectations of library services in the LibQUAL dimensions. Total result emphasised the importance of librarians' specialised knowledge level in presenting appropriate services in circulation and reference sections.

2.2 India

2.2.1 University Library Resources

Reddy, Uma and Talpasai (1993) present the results of a survey of faculty satisfaction with the periodical collection in sciences, social sciences and humanities at the University of Hyderabad library. The survey showed that a majority of faculty were not satisfied with the library periodical collection. Barua and Tripati's (1988) report about the results of the study conducted at Burdwan University Library to investigate information sources used by them, types of information consulted by scholars, various approaches to information, problems of access to information, and the various services provided by the university library and information / documentation centers. Kawatra (1988) study based on three universities of Rajasthan-Rajasthan University Library, Jaipur, Sukhadia University Library, Udaipur, and Jodhpur University Library established research scholars’ impressions
of the adequacy of library resources. **Maheswarappa and Havanur** (1998) report results of a study conducted at Karnataka University, Dharwad, of the relative importance of information sources among biological scientists and social scientists respectively. It showed that personal attributes of biological scientists such as designation, experience and nature of research in a university environment have a bearing on the use of information sources. **Tadasad and Kalamadragi** (2000) studied P.G. students of Gulbarga University, Gulbarga’s approach towards newspapers in a University library. **Tadasad and Metesheela** (2001) based on survey of 204 P G Students of Gulbarga University studied the relative importance of information sources among the P.G. students. **Maheswarappa, Havanur and Tadasad** (2004) report the results of a study conducted at Karnatak University, Dharwad, of the relative importance of information sources among biological scientists and social scientists respectively. It showed that personal attributes of biological scientists such as designation, experience and nature of research in a university environment have a bearing on the use of information sources. **Reddy** (2010) discusses a study on the use of information sources at the Gulbarga University Library in Gulbarga, India by research scholars pursuing doctoral degrees. The study focused on the frequency and purpose of library visits, research scholars’ opinions of the library and satisfaction with its information sources, and resources searched most often. **Sheeja** (2010) investigates research scholars’ perceptions of the information sources, services and infrastructures in university libraries in Kerala. The study revealed that the organization of resources and services in university libraries is not fully oriented towards supporting the process of research, and scholars were not satisfied with existing primary resources and personalized services.

**Reddy** (1979) identifies the gap between the library staff and researcher in the use of the university libraries, particularly through the use of periodicals reviews. **Lahiri** (1988) presents the results of a survey of users of the periodical section of Manipur University library to identify their information seeking behaviour and their accessibility to the holdings of the section. **Satyanarayana** (1993) reports about the results of a survey of the faculty of users of the Andhra University Library, to determine the use made of periodicals in the library. **Biradar and Sampat Kumar** (2000) identify the use of periodicals by teachers and research scholars of Kuvempu University, Shankaraghatta. Result of the study shows that the large number of teachers and research scholars use the subject periodicals most frequently and frequently. It is also observed that good number of users remarked lack of secondary periodicals and lack of online and CD - ROM database search facility in their library. **Ahmad**
and Haridasan (2006) investigate the use of periodicals by the veterinary scientists. The study revealed that the users were satisfied by the various services provided. Mallaiah and Gowda (2009) examine the usefulness of collection development in a university library. The study identifies whether the required document/information is available or not to meet the user needs, examines the periodicals and other publications are on time at the library. The study also makes an attempt to know if the UGC-INFONET E-journals meet the user requirement.

Aditya Kumar and Talwar (2011) study the reference sources collection, i.e., handbooks & manuals, bibliographies, dictionaries, encyclopedias, biographies, directories, yearbooks & almanacs, geographical sources, indexing & abstracting sources in seven university libraries of Karnataka. Among the reference collection, dictionaries and encyclopedias are more in number as against geographical sources of information and directories in university libraries. The study also gives a comparative analysis of reference collection in university libraries with its number of users. Ahmadi, Dileepan and Muragi (2012) examine the advantages of developing a simulation model of the activities of a university library, in order to balance the available resources with demand for services. This study illustrates the need for careful analysis of arrival of patrons, resource levels, and resource usage with the objective of developing a resource level decision strategy that will result in an optimal level of resource usage by patrons.

2.2.2 E-Resources

Kaur (2012) examines academics attitude towards use of e-journal. A well structured questionnaire was designed to elicit the opinions of the users. Responses were gathered from 542 faculty members of five universities. The results of the study showed that the characteristics that affect the choice of e-format over print in order of preference are ‘faster access’, ‘available from desktop’, ‘convenience’, ‘remote access’, ‘timeliness’, ‘available at all times’, ‘hyperlinks’, ‘multi-user access’, ‘currency of information’, ‘inclusion of audio–video material’, ‘interactivity’ and ‘animation of graphics’. Sethi and Panda (2012) present the study on the use of electronic resources (e-resources) by life scientists, with a focus on Sambalpur University in Burla, India. Gowda and Shivalingaiah (2009) report the results of a study of scholars in Karnataka, India concerning their attitude towards the use of electronic information resources. Kumar and Kumar (2010) examine the perception and use of e-resources and the internet by the engineering, medical and management academics in
Bangalore City, India. The results show that the students and faculty are aware of e-sources and also the internet.

**Madhusudhan** (2010) focuses on the use of e-resources by research scholars of Kurukshetra University, Kurukshetra (India), and found that electronic resources have become an integral part of the need of information of research scholars at Kurukshetra University. **Maharana, Sethi and Behera** (2010) investigate the usage of Internet and e-resources by the P.G. students of Business Administration, in Sambalpur University, Orissa, India. The result shows that majority of the students have a long experience of using Internet for 2 to 4 years and all are more or less aware of the applications of Internet technology. **Thanuskodi** (2011) examines the usage of electronic resources at Dr T.P.M. Library, Madurai Kamaraj University. The results show that P.G. students and research scholars were aware of the e-resources and various types of e-resources, e-database, and e-journals. **Chandran** (2011) evaluates the use of electronic resources made available in the Tirupati (A.P) university libraries under the UGC-INFONET E-journal/ digital library consortium of UGC/INFLIBNET amongst the P.G students of science and technology with special reference to sri Venkateswara university, Sri Padmavathi Mahila Viswa Vidyalayam, Acharaya N.G. Ranga Agricultural University and Rastriya Sanskrit Vidyapeeth. **Shreedhar, Santosh, Kumar Sangeeth and Seema** (2011) examine the use of e-journals by the Bio-science students of Kuvempu University. The survey results provide information about the e-journal usage, purpose of use, benefits of using e-journals, influence of e-journals on individual academic efficiency, views regarding the unique features of e-journals and problems faced by the users while accessing e-journals. **Anandhalli, Shakuntala and Patil** (2011) explore the utilization of e-resources by medical students and highlight the use of different types of electronic resources. Francis (2012) discusses utilisation of consortia-based digital information resources by the post graduate and doctoral students of the Kerala Agricultural University, Thrissur. Results show that cent percent of the students were familiar with the use of digital information resources available online.

**Ali** (2005) examines awareness among users of IIT Delhi library of EIS services, use of e-journals, advanced search facilities, acquaintance with electronic information sources, the purpose of using e-information, problems faced by the users while using EIS, infrastructure facility available and satisfaction level of users. **Khan, Zaidi and Bharati** (2009) focuses on finding out the level of use of on-line databases by faculty members and
research scholars of the Jawaharlal Nehru University (JNU) and Jamia Millia Islamia (JMI), Delhi (India). The survey reveals that the respondents from both universities are aware of the search options for accessing on-line databases. It is also found that a large number of respondents of JNU and JMI are using field searching and Boolean operators to access information from on-line databases. Kapoor (2010) quantifies the use of electronic journals in comparison with the print collections in the Guru Gobind Singh Indraprastha University Library. It is found that, although many more users at the University are accessing electronic journals, it is not affecting the use of the print collection. Natarajan, Suresh, Sivaraman and Sevukan (2010) report based on a Survey of 117 faculty members and research scholars on use and user perception of electronic resources in Annamalai University reveal that despite the availability of wide range of e-resources the frequency of their use was low.

Raju (2010) surveyed the users of Andhra University to find out the usage of Electronic Resources. It reveals that despite the availability of wide range of e-resources the frequency of their use was low. Kapoor (2010) quantifies the use of electronic journals in comparison with the print collections in the Guru Gobind Singh Indraprastha University Library. A detailed analysis was made in the use of lending services, the Xerox facility and usage of electronic journals such as Science Direct, Emerald Management Xtra, ACM, and IEL Library, subscribed to by the Library. Swain (2010) discusses the status of use and adoption of ETDs in various different parts of the world, describes the history and development of ETDs, key issues governing ETD projects, potential merits of ETDs for effective teaching and research, and ETD initiatives in India. Nikam, Rani and Mahamed (2011) study evaluate the use of e-journals among chemists, physicians and mathematicians of the users of Mysore university library, university of Mysore, Mysore, to find out the value and impact of E-journals on the faculty and research scholars in the chemistry, mathematics and physics. Kaur (2011) examines the impact of e-journals on university libraries in terms of resources, staffing, space, technical services and equipment. The results of the survey provide useful information regarding the impact of e-journals on subscription to e-journals, infrastructure, staff, space, technical services, photocopying, inter-library loan, and library use and reference services. Sinha (2012) examines view on the extent of ICT/ Internet awareness and status on use of e-resources by the Assam university library users. Deval (2012) highlights some of the facts associated with the use and assessment of digital information resources and focuses on the usefulness of digital information resource collection for the CGSIP university library.
2.2.3 University Library Facilities

Mallaiah and Badami (1993) report the results of a questionnaire survey of research scholars at Mangalore university library, India to determine the use of information service facilities at the library. Baruah (1981) made a comparative study of the readers’ use at North-eastern Hill University and Gauhati University. Pangannaiah and Poornachandra (1982) present the results of a survey of the use of the Mysore University Library catalogue by different sections of the academic community with regard to prominent approaches to the catalogue and usefulness of the catalogue. Kanakachary (1989) find out the attitude of use of the catalogue including its parts, at Kakatiya University Library, Warangal. The study reveals that the classified catalogue is not used at all and the author and title catalogue are consulted to the maximum. It is also found that 80% of the consultations of card catalogue are to locate documents, and to make comprehensive search for references on a topic and rest for miscellaneous purposes.

2.24 E-Facilities

Shishido (1997) Presents results of a survey conducted at two university libraries to identify difficulties that students face when they use online public access catalogs (OPACs). The results indicate that the purpose of using the OPAC varies according to class level. Although the success rate of known-item searches reached nearly 90%, users were not fully satisfied with the OPACs. Almost half of the subjects experienced difficulties with subject searches, keyboard manipulation, and interpretation of search results in a study conducted by Mukherjee and Kumar (2010) of research scholars of Banaras Hindu University, Varanasi, reveal that, there is a demand for more e-journal titles, although a substantial number of users (61.90 percent) are satisfied with the existing model of UGC-Infonet Consortium.

Ansari (2008) establishes the opinion of users with respect to the awareness and utilisation of, as well as their satisfaction level with, the use of the online public access catalogue (OPAC) in five libraries in New Delhi, namely the Indian Institute of Technology; Jawaharlal Nehru University Library; Dr Zakir Husain Library, Jamia Millia Islamia; National Information System for Communication and Information Resources (NISCAIR); and the Defense Science Information and Documentation Centre (DESIDOC). Kumbar and Mallaiah (2008) describe the efforts of Mangalore University Library in developing an Online Public Access Catalogue with the aim of increasing the information retrieval
efficiency and providing easy access to the users. **Devi and Singh** (2009) undertook a study to assess the attitude of internet users, taking into account the use of internet by research scholars of Manipur university library, India. **Parameshwar and Patil's** (2009) survey on the use of the Internet as well as the extent of the Internet use by the faculty members and research scholars found that faculty members have more experience in using the Internet than research scholars and the research and education are the main reasons for accessing the Internet. **Sarasvathy and Giddaih** (2010) surveyed the users of Internet Centre of University Library, Mysore, regarding the usage of Internet resources. **Kumar and Vohra** (2011) discuss on various aspects of OPAC such as frequency of use, purpose, ease of use, satisfaction level, etc. An attempt is also made to explore the reasons for the least used search options of OPAC. **Kumar** (2013) investigates the manner and purposes for which users search the Online Public Access Catalogue (OPAC) in the University Libraries of India. The study is a comparative analysis of the use of OPAC in three universities located, in the Union Territory of Chandigarh and Punjab, a northern state of India.

### 2.2.5 University Library Services

#### 2.2.5.1 General Services Students

**Doraswamy and Reddy** (1995) analyze the results of the use of the photocopying service offered by Sri Venkateshwara University, Tirupati, and Andhra Pradesh. It reveals that, research scholars use the service most, especially those from the arts disciplines, books are the subject of most photocopying, English language materials are used predominantly and current periodicals are used more than non current titles. **Ali** (2006) made an assessment of the library resources and services by the researchers has been made and presented in this article.

#### 2.2.5.2 General Services

**Dash** (1998) evaluates the quality of the periodical service of Smt. Hansa Mehta library of the Maharaja Sayajirao University of Baroda and found that the periodicals are used for research and the degree of benefits received from the service is low and the quality of the periodical service is relatively poor. **Ramesh** (2004) discusses about library service is the supreme activity to attract the attention of the user community. It is more so in the case of a university library. Looking at the commitment of the university library to promote the cause of healthy higher education, it is essential on the part of the library professionals to evaluate and assesses the usability of the library resources in the light of the vast amount of investment.
made in acquiring the information resources and the cost of the manpower in managing the library activity. This paper reveals one such attempt with reference to the university libraries in the state of Karnataka which is a part of Independent India. Singh and Udani (2004) present a study on the redesigning of University libraries in Gujarat state. Sharma (2009) examines the status and use of the Internet in Punjab Agricultural University and Haryana Agricultural University. Kannappanavar and Swamy (2011) evaluate the practices and utility of interlibrary loan services provided by the agricultural science university libraries in South India. Kannappanavar and Swamy (2010) present a use study of academic libraries and their information services in agricultural science universities in south India. Library users were surveyed on their information and service needs, opinions of services available and on problems they face in library use. It was found that roughly half of users visited a university library on a daily basis, and that roughly half of users spent between one and two hours per visit. A discrepancy is noted between a high level of user satisfaction with traditional library resources such as books and periodicals and a low satisfaction level with the availability of electronic information resources.

2.2.5.3 E- Services

Reddy and Ali (2006)] survey evaluates user satisfaction towards the services provided by the library in the IT environment. Questionnaires were distributed to P.G.students and research scholars in the university and the data analyzed indicates that P.G.students and research scholars are satisfied with the library services of Indra Gandhi Memorial Library, University of Hyderabad. Rokade and Rajyalakshmi (2005) describe the present condition of information services in agricultural university libraries in Maharashtra, India. Surveys are conducted on the information services of four agricultural university libraries. Results show that most university libraries provide information services free of cost which will not be affordable in the future due to high cost of Internet, electronic journals, and prices of books. Mulla (2006) based on a study gives an insight into why people are interested and what is their attitude towards the use of Internet based information resources and Internet use. Shinde and Ingale (2007) reports the results of a survey to examine students' opinion on various aspects such as awareness, usefulness, and helpfulness of Information Technology like Internet and on-line journals on the improvement of education in University Library, Mahatma Phule Krishi Vidyapeeth, Rahuri, in Maharashtra, India. Kumbar and Mallaiah (2008) describes the efforts of Mangalore University Library in
developing an Online Public Access Catalogue with the aim of increasing the information retrieval efficiency and providing easy access to the users.

2.2.5.4 Specific Services

Arshad and Ameen (2010) measure the service quality of academic libraries of a major university from students' perspectives and to determine libraries' own performance towards meeting users' expectations. The results revealed that users' expectations were high as compared to their perceptions, and a discrepancy was found between expectations and perceptions of all 22 SERVQUAL statements.

2.3 Conclusion:

The review of literature revealed that a number of studies have been reported worldwide and in Indian context as well. Studies have been conducted in different University setups and extend their scope to individual resources, services and facilities to integrated study of resources, services and facilities. But still in the Indian context no significant and comprehensive study of users attitude towards resources, services and facilities and different sections of a University library has not been undertaken to strengthen the need for the study.

REFERENCES


Aderibigbe, Nurudeen Adeniyi and Emmanuel, Sunday Oluwafemi. (2012). Use of library information technology resources by graduate students of university of agriculture, Abeokuta, Library Philosophy and Practice, 1-10


Al-Ansari, Husain. (2006). Internet use by the faculty members of Kuwait University. *The Electronic Library*, 24 (6), 316-327


Burns, Robert W, Jr and Hasty, Ronald W. (1975). A survey of user attitudes towards selected services offered by the Colorado State University libraries, IN: University of Illinois Graduate School of Library Science Occasional papers, 121, Occasional papers, publication office, 14


Chrzastowski,Tina.E and Joseph, Lura. (2006). Surveying graduate and professional students’ perspectives on library services, facilities and collection at the university of Illinois at
urbana-campaign: does subject discipline continue to influence library use?, *Issues in Science and Technology Librarianship*, 45, NP


Mallaiah, T Y and Badami, KK. (1993). Library and information service facilities in Mangalore University library from the research scholar’s point view: A survey. *Annals of Library Science and Documentation*, 40(4), 155-165


Myer, Sue and Porritt, Frances. (2005). Evaluating awareness of information resources at partner colleges of the University of Teesside *VINE*, 35(4), 91-104


Roberts, Jacqueline M. (1995). Faculty knowledge about library services at the University of the West Indies. *New Library World*, 96 (2), 89-95


Xiao, Norah. (2008). Web 2.0 as catalyst: virtually reaching out to users and connecting them to library resources and services, *Issues in Science and Technology Librarianship*, 55, NP

