

THE USE OF E-RESOURCES BY HUMANITIES SCHOLARS: A SYSTEMIC LITERATURE REVIEW

FAYYAZ HUSSAIN¹, MUDASSAR HUSSAIN²

ABSTRACT

The use of electronic resources is currently very common. Electronic resources have great potential in terms of education and research. An e-resource can be defined as something that can be accessed through a computer, or it can be any electronic device that carries a collection of information. The purpose of this systematic literature review is to examine the patterns of use of e-resources by humanities scholars. Literature selection was conducted from three databases including Library Information Science and Technology Abstracts (LISTA), Emerald Publishing and Google Scholar. Only peer-reviewed, full text, empirical studies published in English. A total of 542 studies were retrieved and only 18 made up the final sample. Analysis of recognized literature; some studies revealed that humanities scholars are still not used to with e-resources and still preferred print resources, they are very much concerned about electronic formats. Some of them think that, with the help of ICT's, their search becomes easier. Based on the evidence, conclusion was made, that humanities scholars believe in the usefulness of electronic resources, but due to some concerns, they still prefer physical resources to electronic resources.

Keywords: E-resources, Systematic Literature Review, Humanities Scholars, Electronic product, Information Sources

JEL Codes: D8, G14

I. INTRODUCTION

The Information Communication Technology (ICT) revolution has proved the global village concept and remoteness is no more barriers in retrieving the required information now. Researchers can cooperate mutually, similarly as they are living in the neighborhood. The ICT has made significant impact on the techniques in which information is kept and retrieved. The web also has introduced new and powerful means for locating and distributing information. Efficient and faraway round the clock availability of information has made the accessibility to online resources very much easier and faster. The users are now in high hopes that, due to the rapid access to available range of e-information resources in a short time will ease their research activities. It has not only affected the instructions style and behaviors of researchers, but also influences the mediums they prefer in their work. A large range of resources at different sites, are available at one click. In natural sciences or social sciences all research is being done in the labs and fields while the scholars in humanities trust on monographs. Normally humanities researchers discover the knowledge through reading, interpreting and synthesizing materials that are usually available in libraries. The advancement in ICT has made a great impact on the work of humanists as well. It is a known fact that humanities scholars are strongly attached with books, they differently perceived the usage of e-resources than other disciplines. It is evident from the literature that, there are different forms of claims. The outcomes of some studies indicate, despite the development of information technology and availability of wide range of information resources, humanities scholars are still clinging to their old print resources and avoiding the use of modern means.

Many research articles have shown that, humanities scholars do not use e-resources frequently. Reading and writing are basics in humanities research; it is not unexpected that some humanists are hesitant to adopt e-resources. Generally it is supposed that humanities scholars are unaware from emerging technologies and still preferred printed resources as compare to the e-resources (Bevilacqua, 2005; Dalton & Charnigo, 2004; Horner & Thirlwall, 1988; Sukovic, 2008; Audi and Ali, 2017; Audi and Ali, 2017; Audi et al., 2021; Audi and Ali, 2015; Kassem et al., 2019; Roussel et al., 2021; Sajid and Ali, 2018; Senturk and Ali, 2021; Sulehri and Ali, 2020). Although, the ICT's have initiated important reforms in

¹ Sheikh Zayed Islamic Centre, University of the Punjab, Pakistan.

² Civil Court, Chiniot, Punjab, Pakistan.

different areas of daily life and research activities, but it has happened that the humanities scholars have mostly feel uncomforted by new technologies. A desire for transformation has been seemingly contained in sidelines of the humanities area. The key motives have often reported about the nature of humanities research, humanists have resistant to technology in general. It is very difficult for humanists to read lengthy paragraphs of text on a monitor because of the poor quality of surrogates and mostly the perspective obtained from printed sources is missing in electronic formats. Additionally, it could be inconvenient or even difficult to make summaries on the script and write note beside by using these modern tools. Findings of an investigation steered by Levine-Clark, 2007 reveals that teaching faculty in humanities used the e-editions as a reserve when physical resources were not available. While Tahir, et al., (2010) stated that humanities research scholars "stick to print materials, they do pay good attention towards electronic technology". Likewise, there are studies in literature that have shown that since the year 2000, humanities scholars have accepted online information sources because of their merits (Chrzastowski & Wiley, 2015; Liew, et al., 2000; Sathe, et al., 2002). These studies elaborated that scholars in humanities favored to use e-books, though a printed copy was available, and that the scholars would like to see more e-content in their subject area. The reason behind this preference is better searching abilities, links to further resources, their currency, their accessibility, and comfort of printing. Increased availability of e-resources in humanities also changes the impression. Hence, by the increasing acceptance of electronic resources, many libraries are progressively shifting from print forms to electronic forms where provision to access of material is much vital than holding it. Furthermore humanities scholars, like other disciplines, rely on online resources and use these resources more and more in their needs. Thus, in the light of these studies, the picture about the usage of electronic resources in humanities research is very blurred. It seems necessary to provide an up-to-date comprehensive review of these empirical studies. Getting better understanding of the situation, using systematic review methodology, this effort would facilitate researchers, to gain a better picture of understanding of research that has already been done.

II. SIGNIFICANCE

Humanities scholars are using different variants of electronic resources. Review of the studies will support us to get complete knowledge regarding the type of e-resources humanists are used. The aim of this review is to explore the patterns that are discovered in articles about the usage of e-resources by using a systematic literature review method. "Systematic review differs from narrative type of literature reviews. Narrative review provides only a summary and overview of the content available on a particular topic, while a systematic review is more narrowly focused and seeks to assemble, critically appraise or evaluate and synthesize the results of primary studies in an integrative approach (McKibbon, 2006)". Systematic review was initially used in the field of health sciences. In systematic literature review we summarize the results of selected literature to understand the current scenario about what humanists do, and on what electronic resources they depend on for their research needs. A systematic review offers to the researchers, an evidence-based information, comparisons, analysis and synthesis of the outcomes about the studies under consideration. This systematic literature review is also beneficial to other stakeholders as well.

III. ELECTRONIC RESOURCES

An electronic resource (e-resource) can be defined as a resource which can be accessed through computer, or it could be any electronic product that carries a collection of information. E-resources provide information access to the users in cheaper and are capturing a major share of the worldwide literature. According to Library of Congress (2016) "Electronic resource is defined as any work encoded and made available for access using a computer. It includes data available by (1) remote access and (2) direct access (fixed media). In other words: Remote access (electronic resources) refers to the use of electronic resources via computer networks (AACR2, 2002). Direct Access (electronic resources) refers to the use of electronic resources via physical carriers (e.g., discs/disks, cassettes, cartridges) designed to be inserted into a computerized device or its auxiliary equipment." According to International Federation of Library Association (2012) "Electronic resources refer to those materials that require computer access, whether through a personal computer, mainframe, or handheld mobile device. They may either be accessed remotely via the Internet or locally. Some of the most frequently encountered types are: E-journals, E-books, Full-text databases, Indexing and abstracting databases, Reference databases (biographies, dictionaries, directories, encyclopedias, etc.), Numeric and statistical databases, E-images, E-audio/visual resources."

IV. HUMANITIES

Humanities is a broader term that deals with academic disciplines to study aspects of human society and culture. The disciplines normally included in humanities are archaeology, architecture, arts, communication studies, history, languages, linguistics, literature, media studies, music, philosophy and religion. **V. METHODS**

In this review, the reviewers conducted a systematic study to provide an unbiased synthesis of literature and elaboration of the outcomes of the selected studies in an impartial and unbiased way. First step is to articulate the following research questions, that reviewers trying to address in this systematic review.

- 1. What type of e-resources used most by humanities scholars?
- 2. Do humanities scholars still prefer print resources over e-resources?

V.I. DATA COLLECTION

V.I.I. SEARCH STRATEGY

Three databases were searched for the purpose of literature identification including "Library Information Science and Technology Abstracts (LISTA)", Emerald publishing and Google Scholar. First of all, the database LISTA were searched using advanced search (Boolean operator) option on the EBSCO platform using terms "use", "usage", "utilization" AND "e-resources", "electronic resources", "information resources". Snowball technique (references of the studies) was also applied on retrieved studies to get more relevant literature. Same search strategy was employed in remaining two databases. As a result, a total of 552 studies comprised 120 studies from LISTA followed by 101 from emerald and 331 from Google Scholar were retrieved.

VI. INCLUSION AND EXCLUSION CRITERIA

Studies having terms e-resources, electronic resources, information resources along with humanities, humanists either as a subject or keyword or within abstracts were identified. Only peer reviewed articles published in English till March 2020 and full text available were examined for the use in this review. Quantitative, qualitative, and mixed methods studies were also considered for inclusion. As discussed in the introduction section remote access e-resources like e-books, e-journals, e-theses, and databases were, or at least one type from these, was included in the study. Studies focused on humanities as population, were included for review. Studies published in other than English language, duplicates, reports, editorials, dissertations, reviews on articles, book chapters and conference proceedings were excluded. The reviewers, concurrently working on the usage of electronic resources in humanities thus, articles about other disciplines like social sciences, arts and so on, were removed as they did not meet the initial criteria. Each one of the article was evaluated against inclusion and exclusion criteria. Consequently, 18 studies met all the criteria. A diagram, representing of the literature search and review steps can be studied in Fig.1.

VII. SELECTION OF THE RELEVANT STUDIES AND DATA EXTRACTION

The full texts of 18 finalized articles were studied. Figure1. displayed the selection procedure. After appraising the relevant articles, reviewers extracted the necessary data including author with date, country, instrument, population its sample and response rate, type of e-resources used, purpose of the study and conclusion of each article. These studies were evaluated for the review purposes.

VIII. FINDINGS

The findings of these selected studies are presented in table. Remaining part concentrate on the findings, constructed on two research questions of this review. The first research question considers that, what form of e-resources used most by humanities scholars? The second research question examined, do humanities scholars prefer e-resources over print resources?

VIII.I. EXAMINATION AND EXPLANATION OF THE ARTICLES

The reviewers identified 18 relevant articles, after analyzing them, on defined inclusion and exclusion criteria. These are all open access, full text articles published up till March 2020. Table 1 provides the detailed analysis of selected articles, the annual distribution of articles showed that in the years 2008 and 2014, three articles published in each year are the maximum in numbers, while the year 2010 has two articles, the remaining years 1995, 2005, 2007,2011, 2012, 2015 to 2019 have each article. It can be claim that the first investigation about the usage of e-resources in humanities scholars be traced from 1995. First column mentioned the authors and the year of publication. Second column illustrates the researchers and country affiliations of the first author. The use of e-resources in humanities scholars worldwide can be seen clearly. United States has published five articles the highest in number. It is pertinent to mention that the first article of 1995 was also appeared from United Stated. United Kingdom published three, followed by India and Taiwan two articles each, while Australia, Canada, Greece, Italy, Malaysia and Pakistan have published one article only. Country affiliation analysis depicted that e-resources are popular in developed and developing countries equally. Third column presents the research methods of the selected studies, almost all popular research methods of three research designs (quantitative, qualitative, and mixed methods) have been used.

Fig.1. Literature search and its review process

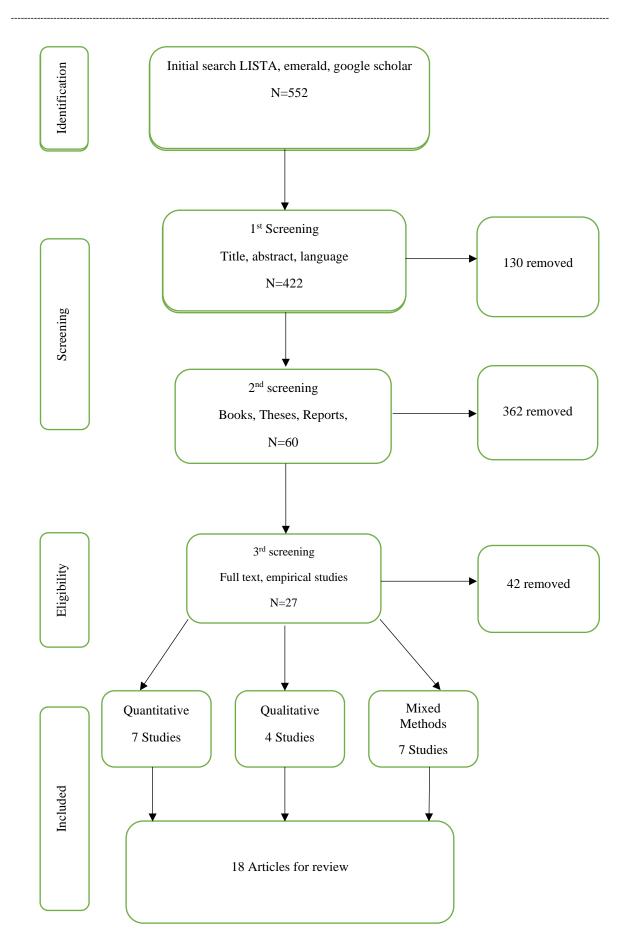


	Table 1. Selected Studies						
Author/ Year	Country	Research Method	Population/ Sample/ Response	Types of e-resources used	Purpose of the study	Conclusions	
Quantitativ	e Studies		•		•		
Angadi, M. et al., 2017	India	Survey	Humanities Scholars 100/ 90%	e-books e-journals e-theses databases	"To explore the extent of usage of electronic information resources among research scholars of humanities discipline."	"Fifty percent preferred both print and online resources, thirty percent preferred online resource and only twenty percent preferred printed resources. Majority of the research scholars were dependent on print and also on electronic resources to get their relevant information."	
Levine- Clark, M. et al., 2007	USA	Survey	Humanities Scholars Web based/ 2067	e-books	"To explore the level of awareness and patterns of usage of e-books by humanities scholars."	"Humanists rely on printed books for their research because they conduct research differently from other disciplines. Humanists use e-books less frequently than do others, 67.7% preferred the print copy of e-book."	
Murray, D.C. 2018	USA	Survey	Humanities Scholars 102 50%	e-books	"To find out information about the e- book collections and how humanities scholars avail benefit from it."	"No participant in the study felt that e-books are more important than printed books. Scholars perceived that printed books were more valuable in humanities discipline."	
M., Linsha et al., 2017	India	Survey	Humanities research scholars 100/ 85%	e-books e-journals e-theses databases	"To find the information about electronic resources usage by humanities research scholars and to explore the reasons for selecting these resources."	"The study indicated that most of the researchers were satisfied with print resources. A significant number reported that they were moderately satisfied with e-resources."	
Tahir, M. et al., 2010	Pakistan	Survey	Humanities Scholars 120/ 69%	e-books e-journals databases	"To assess the use of e- resources by humanities research scholars."	"Databases, e-journals, e-books, placed a great impact on humanities scholars. Although they still stick with print, they do pay good attention to electronic technology. They faced many problems in retrieving and using electronic facilities."	
Tomas, E.G. et al., 2008	Canada	Survey	Humanities Scholars 146/ 86%	e-resources e-text	"To find out the current usage of electronic text in humanists' research; their research environment especially with respect to collaboration and also their use of primary and secondary sources."	"Basic data sources of humanists are texts. When e-texts are used the preference given to free reliable, peer-reviewed and open access e-texts. Humanities scholars expect that e-texts should be available in comparative price to print. Researchers were lesser keen about paying for an online e-text subscription from their pocket or from research grants."	
Tsoukala, V. et al., 2011	Greece	Survey	Humanities Scholars 1488/10.60%	e-journals	"To assess needs and satisfaction of humanities scholars with e- journals."	"E-journals are progressively supposing a more significant place in conducting and publishing research in the humanities. Scholars	

						still rely largely on print journals and other print resources as well."
Qualitative S	Studies					
Al-Shboul, M.K. et al., 2014	Malaysia	Intervie w	Humanities Scholars 26/ 100%	e-resources	"Information needs of humanities scholars."	"Printed textbooks were the dominant type of information. Senior scholars were still the users of physical textbooks, journals and ready reference sources; but the junior scholars familiarized themselves with both print and electronic resources simultaneously. It was confirmed through the data analysis that the older personas solely rely on printed sources for both research and teaching needs. The Internet-savvy scholars use different databases and e-journals more than the print version of these resources for doing research."
Collins, E. et al., 2012	UK	Intervie ws	Humanities scholars 6/ 100%	e-resources e-books databases	"How humanities research scholars currently access, use and share electronic information."	"Strong awareness is required for e-resources. Scholars have created mini databases of useful content, on their personal drives and on other online tools. They used printed editions of the same texts to check reference and page numbers. Many researchers mentioned their concerns that digitized versions of source material are often partial and unsustainable."
Rimmer, J. et al., 2014	UK	Open ended Questio nnaire	Humanities Scholars 14/ 100%	digital resources digital documents	"A study of humanities scholars' perception about the information resources they use."	"In general participants were comfortable, for being surrounded by books. Their experience regarding digital library was like, as unmanageable, perhaps more time was spent in chasing resources, physical libraries were perceived as better browsing interactions. Reliability issue in digital surrogates was a concern raised by several participants. Common criticism in the interviews was concerned with accuracy, quality and credibility of electronic resources. Interviewees described an unwillingness to read for long sessions on computer screen, and opting to send them to their printer. "
Sukovic, S. 2008 Mixed Metho	Australia	Semi structur ed intervie w	Humanities Scholars 16/ 100%	e-resources	"Explored scholar's interactions with electronic texts as primary material, how they interact with e- texts and how these interactions contribute in research process."	"Serendipity is a main part of information encounter, reproductions of electronic variants and environments as well as inherent qualities of different media are reasons why most users need materials in analog and digital forms. Scholars work with e- texts in ways that employ traditional behaviors. In the complex process of evaluating the trustworthiness of e-texts, researchers valued access to e-texts that had been digitized or selected by trusted libraries."

Bates, M. J. et al., 1995	USA	Survey, Interviews	Humanities scholars 28/ (27) 96.50%	e-resources	"Their attitudes about online searching "	"There was a strong desire found for primary materials and of journals well before 1975. Identified problems are rigidity of Boolean logic, difficult to formulate search queries, variation in standards between databases. The resources do not full fill the information needs of researchers, particularly in historical and primary research materials, while the interface of electronic product is difficult to use for end user. Undoubtedly scholars will continue to use these resources but some training is needed."
Bevilacqua, F. 2005	Italy	Focus group Observations Interviews and Questionnaire	Humanities Scholars Focus group=5 Observation=4 Interview=9 Questionnaire= 217/ survey=26.7% remaining all 100%	e-resources	"To find out the usage of electronic journals and what characteristics the organization of e-journals should have to enable for easy discovery."	"A majority of 65% respondents were nonuser, while 31% were using e-resources, interviewees and focus group participants are comfortable with e-resources. Most scholars were unaware of the resources available in electronic format in their area of research."
Chen, S. 2019	Taiwa n	Citation analysis Interviews	Humanities Scholars 13/ 100%	e-books e-journals e-theses databases	"How research scholars use electronic resources during their research activities in humanities."	"79.65% were used e-books, 15.58% Journals, 1.74% e-theses and 1.74% used databases. E-books are eminently used by humanities scholars. They indicated that accuracy and authenticity is pertinent to their research and the cross-checking of electronic copies with original documents is necessary."
Chrzastows ki, T.E. et al., 2015	USA	Survey Usability evaluation Open ended Questionnaire	Humanities Scholars 1134/ (152)/14.4%	e-books	"To explore e-book adoption in the humanities. To measure the choice between e-book and printed book. To get the views on the adoption of e-books, the role of print books in the future and factors involved in their choice of book format."	"This study established a baseline about the use and present future interest in e-books of humanities scholars. It provide a complete understanding that humanities disciplines have not to date, adopted e-books and users normally found relevant, easily accessible materials in their discipline. It was also found that humanities scholars not yet support a total transition to e-books, note taking was a challenge in e-formats, platforms were difficult to navigate, and many of them still loved print books."
Kachaluba, S.B. et al., 2014	USA	Survey, Interviews	Humanities Scholars 200/ 50% in survey 10/ 100% in interviews	e-resources e-books databases	"To investigate the understandings of humanities scholars about advantages and disadvantages of print versus electronic information resources. It also explores how faculty members use print and	"The participants we surveyed and interviewed were well aware of e-books but they usually preferred to print versions for reading. The majority was engaged with digital technologies and were fascinated by the different advantages and opportunities offered by electronic formats. They were in full support for additional electronic resources in the humanities."

					electronic resources, as well as how they perceived these formats."	
Warwick, C. et. al., 2008	UK	Log Data Analysis Survey Interview	Humanities Scholars 149/ 85%	e-resources	"To explore the usage and importance of information resources in scholarly research."	"The evidence of questionnaire and log data suggests that consumers of electronic resources gave more value to these resources very highly. Electronic resources have not replaced physical information resources such as libraries and archives. Likewise in the humanities, digital resources have not replaced the library as an important research resource."
Wu, M. et al., 2010	Taiwa n	Interviews citation analysis critical incident technique (CIT)	Humanities Scholars 20/ 100%	e-books e-journals e-theses databases	"To answer these questions Do humanities scholars use and cite electronic resources? Do they prefer electronic resources over paper versions?"	"Most participants stated that personal collection of their advisor's was an important alternative source when materials were not available from the libraries. It is not strange for humanities scholars to have large personal collections. All scholars agreed that it was convenient to use electronic resources because they could retrieve a large amount of information within a short time period. However they did mention some usage problems. They cited books largely than other types of documents in their theses. They indicated that they usually spend more time in reading a book and it was inconvenient to read it online."

All measures regarding population, sampling and response rate have been taken properly as per the standards and norms of the research. It is seen that the research methods which are used for online products or information services like log data analysis also used. In the light of this quantitative, qualitative, and mixed methods evaluation, it can be claimed that a holistic picture about the usage of electronic resources by scholars in humanities is being presented with evidences. All 18 studies were identified as being about the humanities scholars and their use of e-resources. Seven studies used survey as their method of data collection. Four studies used interview or open-ended questionnaire as their primary data collection technique. Remaining seven used mixed data collection methodologies, while fourth column indicated about the population of the study, its sample size and response rate. As cited earlier this review will focus only on the remote access e-resources especially e-books, e-journals, e-theses, and databases, or at least one of them must be included in the study as e-resource. Column five described the types of e-resources used in these selected studies in detail. Four studies (Angadi et al., 2017; Chen, 2019; M.,Linsha et al., 2017; Wu, et al., 2010) presented e-books, e-journals, e-theses, and databases separately. Three studies (Collins, et al., 2012; Kachaluba, et al. 2014; Tahir, et al., 2010) mentioned e-books, databases, and e-resources usage individually in results. Two studies (Rimmer at el., 2014; Tomas, et al., 2008;) mentioned two types of e-resources followed by (Al-Shboul, et al., 2014; Bates, et al., 1995; Bevilacqua, 2005; Chrzastowski, et al., 2015; Levine-Clark, et al., 2007; Murray, 2018; Sukovic, 2008; Tsoukala, et al., 2011; Warwick, et. al., 2008) mentioned only one type. Sixth column explained the purpose of the study and the last column presented the conclusions of the selected studies.

VIII.II. RQ1: WHAT TYPE OF E-RESOURCES USED MOST BY HUMANITIES SCHOLARS?

As far as the answer of first question, what type of e-resource used most is concerned, the e-books is dominating with representation in almost all studies, participants of 11 studies are using e-books, the representation of databases by the participants reflects in seven studies so, the second most used type is database, e-journals stood on third with six studies representation followed e-theses at fourth, while eight studies asked their participants e-resources as generic term. The studies having e-books representation are from all three (quantitative, qualitative, and mixed methods) segments of research. As a result, e-book is the most popular electronic resource in humanities scholarship.

VIII.III. RQ2: DO HUMANITIES SCHOLARS STILL PREFER PRINT RESOURCES OVER E-RESOURCES?

The second research question examined, do humanities scholars still preferred print resources over e-resources? Table is evident that there are three types of users in humanities regarding the preference in e-resources and print resources.

VIII.IV. PREFERRING PHYSICAL RESOURCES

One type of scholars is those who are still clinging with physical resources. Six studies (Bates, et al., 1995; Bevilacqua, 2005; Levine-Clark, et al., 2007; Sukovic, 2008; Tomas, et al., 2008; Warwick, et al., 2008) shows that humanities scholars still preferred physical resources. Reasons identified in these studies are unawareness about e-resources and to some extent these e-resources are not fully matched with the needs of humanities scholars.

VIII.V. MODERATELY ACCEPTING E-RESOURCES

Second type relates to those who are moderately accepting e-resources and are using to some extent, but preference gives to print resources. They use e-resources when printed material is insufficient or inaccessible. Table also presents the nine studies (Al-Shboul et al., 2014; Angadi et al., 2017; Kachaluba 2014; Linsha et al., 2017; Murray, 2018; Tahir, et al., 2010; Rimmer et al., 2014; Tsoukala et al., 2011; Wu et al., 2010) that are accepting e-resources well but still comfortable with prints. They are in transition stage. They convinced with electronic resources due to multiple benefits like time saving, round the clock access and efficient retrievals but they are worried about the reliability and authentication of e-resources.

VIII.VI. USING E-RESOURCES AGGRESSIVELY

Third are those, who are using e-resources aggressively and are comfortable with them. Three studies (Chen, 2019; Chrzastowski et al., 2015; Collins et al., 2012) mentioned that participants are aware of e-resources; they have created their own mini databases of useful contents. Study from Taiwan shows that 79.65% scholars using e-books, 15.58% e-journals, 1.74% using e-theses and 1.74% databases, but their only concern about these resources is authenticity and originality otherwise the use of e-resources in humanities scholars is accepted with due course of time but having some reservations. The studies appeared in the years from 1995 to 2008 shows that humanities scholars were reluctant to use e-resources, as this was the starting time of electronic products. Studies appeared from 2010 and onwards showed the significant tilt towards the electronic resources, as this is the time when these resources have been developed successfully. As a result, it can be established that e-resources are accepted and aggressively used in humanities, but they still preferred on print resources.

IX. DISCUSSION

This systematic review provides us a holistic picture, about the use of e-resources by humanities scholars worldwide, since from the inception of information communication emergence. This review also highlights the common attitude in both developed and developing countries as well. As discussed earlier that humanities is an umbrella term involving different disciplines like archaeology, architecture, arts, communication studies, history, languages, linguistics, literature, media studies, music, philosophy and religion. The way of research in these disciplines is different from pure sciences and social sciences. Some earlier studies indicate that humanities scholars were unacquainted with electronic resources. These earlier studies (Bates et al., 1995; Bevilacqua, 2005; Sukovic, 2008) identified some barriers like unawareness, lack of skills, satisfaction, credibility, and unavailability of primary material in use of electronic format. This attitude may be for the reason that the books are predominantly used by humanists and usually books have more length as compare to articles. That makes a significant difference to read a book on screen from title to end cover for a long period. It seems painful, specifically with academic books, which needs more concentration. Though humanities scholars are still in favor of print resources, but they do pay considerable attention to electronic format. They think that their research has become much easier with the help of information communication technology. When they feel that eresources have improved their research activities, subsequently they opted it. It can be concluded that this image

is going to be changed that humanities scholars are reluctant to adopt electronic materials. It is evident (Collins, et al., 2012; Levine-Clark, 2007; Tahir, et al., 2010) that there is still a need of library and library professionals as information mediators because the hybrid print and electronic use has been observed in some studies. The continuing attention in both print and electronic versions of content makes clear that researchers realized the value of new technology. Electronic resources have undoubtedly affected the research needs and attitude of humanities scholars. Consequently, libraries should complement rather than change their paper collections. Some recent studies (Angadi, et al., 2017; Chen, 2019; Linsha, et al., 2017; Murray, 2017) shows that over the period of time, humanities scholars have become more and more accustomed to electronic resources and have successfully incorporated them into their daily educational needs, especially in research. Now they are well aware of its benefits. However, an interesting thing has been observed that the focus of their attention is still on the book; the only difference is that they have now started using electronic instead of physical book. One of the main reasons for this is that, most of the research material on humanities related subjects is of historical in nature, so the importance of the book has remained at the central level from the very beginning. Therefore, they rely more on manuscripts. That is why they use anything in electronic format due to its usefulness, but they return to the physical format to confirm its authenticity before using it as a reference. On basis of evidence we are come up to the conclusion that humanities scholars are convinced with the usefulness of electronic resources and are making full use of these resources, but they still prefer physical resources to electronic resources due to some certain concerns.

X. LIMITATIONS

One of the limitations of the systematic literature review is its focus only on English language articles.

REFERENCES

- Al-Shboul, M. K., & Abrizah, A. (2014). Information needs: Developing personas of humanities scholars. *The Journal of Academic Librarianship*, 40(5), 500-509.
- Andersen, Deborah Lines, ed. Digital Scholarship in the Tenure, Promotion, and Review Process. Armonk, NY: M. E. Sharpe, 2004.
- Angadi, M. & Karishnamurthy, C. (2017). Impact of electronic information resources and services on humanities research scholars of Karnatak University, Dharwad: An analytical study", *International Journal of Library and Information Studies*, 7(1), 102-110.
- Audi, M & Ali, A. (2017). Socio-Economic Status and Life Expectancy in Lebanon: An Empirical Analysis. *Archives of Business Research*, 5(11), 159-170
- Audi, M. & Ali, A. (2017). Environmental Degradation, Energy consumption, Population Density and Economic Development in Lebanon: A time series Analysis (1971-2014). *Journal of International Finance and Economics*, 17(1), 7-20.
- Audi, M. Sadiq, A. Ali, A. and Roussel, Y. (2021). Performance Evaluation of Islamic and Non-Islamic Equity and Bonds Indices: Evidence from Selected Emerging and Developed Countries. *Journal of Applied Economic Sciences*, 16(73), 251–269.
- Audi, M., & Ali, A. (2016). A Causality and Co-integration Analysis of Some Selected Socio-Economic Determinants of Fertility: Empirics from Tunisia. *Bulletin of Business and Economics (BBE)*, 5(1), 20-36.
- Audi, M., Ali, A., & Roussel, Y. (2021). Aggregate and Disaggregate Natural Resources Agglomeration and Foreign Direct Investment in France. International Journal of Economics and Financial Issues, 11(1), 147-156.
- Audi, M., Ali, A., & Roussel, Y. (2021). The Advancement in Information and Communication Technologies (ICT) and Economic Development: A Panel Analysis. *International Journal of Innovation, Creativity* and Change, 15(4), 1013-1039.
- Bates, M.J., Wilde, D.N. & Siegfried, S. (1995). Research practices of humanities scholars in an online environment: The getty online searching project report number 3. *Library and Information Science Research*, 17(1), 5-40.
- Bevilacqua, F. (2005). Organizing e-journals from the point of view of humanities: A case study at the University of Parma. *New Library World*, 106, 416-429.
- Chen, S. (2019), Exploring the use of electronic resources by humanities scholars during the research process. *The Electronic Library*, 37(2), 240-254.
- Chrzastowski, T.E. & Wiley, L.N. (2015). E-book use and value in the humanities: Scholars practices and expectations. *Library Resources and Technical Services*, 59(4), 172-186.
- Collins, E. & Jubb, M. (2012). How do researchers in the humanities use information resources? *Library Quarterly*, 21(2), 176-187.
- Dalton, M.S. & Charnigo, L. (2004). Historians and their information sources. *College & Research Libraries*, 31(2), 400-425.

- Haider, A., & Ali, A. (2015). Socio-economic determinants of crimes: a cross-sectional study of Punjab districts. International Journal of Economics and Empirical Research, 3(11), 550-560.
- Horner, J. & Thirlwall, D. (1988). Online searching and the university researchers. *Journal of Academic Librarianship*, 14(4), 225-230.
- Jatuf, J. D. (2013). Key Issues For E-Resource Collection Development: A Guide For Libraries. / International Federation of Library Associations and Institutions (IFLA). Acquisition and Collection Development Section. 2012.< http://www.ifla.org/files/assets/acquisitio. *Información, cultura y sociedad*, (28), 113-115
- Kachaluba, S. B., Brady, J. E. and Critten, J. (2014). Developing humanities collections in the digital age: Exploring humanities faculty engagement with electronic and print resources. *College & Research Libraries*, 75(1), 91-108.
- Kassem, M. Ali, A. & Audi, M. (2019). Unemployment Rate, Population Density and Crime Rate in Punjab (Pakistan): An Empirical Analysis. *Bulletin of Business and Economics (BBE)*, 8(2), 92-104.
- Levine-Clark, M. (2007). Electronic books and the humanities: a survey at the university of Denver. *Collection Building*, 26(1), 7-14.
- Library of Congress (2016). Library of congress collections policy statements: Supplementary guidelines. available at: https://www.loc.gov/acq/devpol/LCcontent.pdf
- Liew, C. L. Foo, S. & Chennupati, K. R. (2000). A study of graduate student end-users; use and perception of electronic journals. *Online Information Review*, 24(4), 302-315.
- Liu, Z. (2006) Print vs. electronic resources: A study of user perceptions, preferences, and use. *Information Processing and Management*, 42, 583-592.
- M. Linsha and Bavakutty, M. (2017). Use of information resources by humanities research scholars in Calicut University. *International Journal of Library and Information Studies*, 7(2), 70-78.
- Massey-Burzio, V. (1999). The Rush to Technology: A View from the Humanities. *Library Trends*, 47(4), 620–39.
- McKibbon, K.A. (2006). Systematic reviews and librarians. Library Trends, 55(1), 202-15.
- Murray, D.C. (2018). Humanities e-books: An affective faculty survey. Collection Management, 43(1), 3-27.
- Rimmer, J., Warwick, C., Blandford, A., Gow, J. & Buchanan, G. (2014). An examination of the physical and the digital qualities of humanities research. *Information Processing and Management*, 44(3), 1374-1392.
- Roussel, Y., Ali, A., & Audi, M. (2021). Measuring the Money Demand in Pakistan: A Time Series Analysis. Bulletin of Business and Economics (BBE), 10(1), 27-41.
- Sajid, A. & Ali, A. (2018). Inclusive Growth and Macroeconomic Situations in South Asia: An Empirical Analysis. *Bulletin of Business and Economics (BBE)*, 7(3), 97-109.
- Sathe, N. A. Grady, J. L. & Guise, N.B. (2002). Print vs. electronic journals: A preliminary investigation into the effect of journal format on research processes. *Journal of the Medical Library Association*, 90(2), 235-243.
- Şentürk, İ., & Ali, A. (2021). Socioeconomic Determinants of Gender Specific Life Expectancy in Turkey: A Time Series Analysis. Sosyoekonomi, 29(49), 85-111.
- Sukovic, S. (2008). Convergent flows: Humanities scholars and their interactions with electronic texts. *The Library Quarterly*, 78(3), 263-284.
- Sulehri, F. A., & Ali, A. (2020). Impact of Political Uncertainty on Pakistan Stock Exchange: An Event Study Approach. *Journal of Advanced Studies in Finance*, 11(2), 194-207.
- Tahir, M., Mahmood, K. & Shafique, F. (2010). Use of electronic information resources and facilities by humanities scholars. *The Electronic Library*, 28(1), 122-136.
- Tomas, E.G. & O'Brien, H.L. (2008). Understanding the information and communication technology needs of the e-humanist. *Journal of Documentation*, 64(1), 102-130.
- Tsoukala, V. and Sachini, E. (2011). E-journals and open access journal publishing in the humanities: Preliminary results from a survey among Byzantine studies scholars. *Advances on Information Processing and Management*, 238-241.
- Warwick, C., Terras, M. and Galina, N. (2008). Library and information resources and users of digital resources in the humanities. *Electronic Library and Information Systems*, 42(1), 5-27.
- Wilson, L. A. (2003). If we build it, will they come? Library users in a digital world. In Lee, S. H. (Ed.) Improved access to information: portals, content selection, and digital information. P 19-28. Binghamton, New York: Haworth Information Press.
- Wu, M. and Chen, S. (2010). The impact of electronic resources on humanities graduate student theses. Online Information Review, 34(3), 457-472.