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Impact of E- Libraries on Youth Development: Evidence from the Punjab E-Library Project in Pakistan

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Abstract

The study aimed to explore the impact of e-libraries on youth development in Punjab, Pakistan. The quantitative research method was adopted to address research questions of the study. A questionnaire using the five domains of Youth Development Index of the Commonwealth was developed to collect the quantitative data from young users (aged between 15-29 years) of four e-libraries developed under the Punjab E-Library Project in Punjab, Pakistan. The findings illustrate that e-libraries had a significant positive impact on youth development in all the five domains. The respondents acknowledged the multidimensionality of the e-libraries on holistic uplift and advancement of youth capabilities in all three aspects of human life i.e., social, economic, and political. The study findings have implications for the government authorities, e-library administration and library professionals in justifying resources, identifying users' needs with special reference to the youth, and improving resources and services in the e-libraries.

Keywords: Electronic libraries, digital libraries, Punjab e-library project, electronic resources, electronic services, youth development, Punjab, Pakistan

Introduction

Electronic libraries (e-libraries) have revolutionized the landscape of information services and knowledge delivery worldwide (Roes, 2001) and have drawn a greater focus of the research fraternity. Growing advancements of information and communication technologies (ICT) have revamped the collection of e-library resources and their accessibility to the end-users (Schubert Foo, 2000). The world was confronted with a grave issue of information overload before the advent of computers in the mid-twentieth century (Linde, 2006). Subsequent thinkers proposed to deal with such a phenomenon creatively through the ICT interventions, hence, it paved the way for the initiation of the e-libraries (Trivedi, 2010). Now, this field has become much more advanced as compared to the last decade where the emphasis was on bridging the gaps between different disciplines and devising workable solutions to ensure their integration into the e-library systems (Siyabonga Mhlongo, 2005). E-libraries have got momentum with the advent of modernized technologies. E-library resources are popular among the users due to their efficiency, vitality, economy, environment friendliness, and round-the-clock availability amongst others (Bamgbade, 2015).

Being one of the vibrant components of modern library and information science (LIS), e-libraries span over major topics of the discipline with a special focus on computer science, resultantly promote significant research and development agendas in the given fields and sub-categories across diversified disciplines (Pomerantz & Choemprayong). Furthermore, there are scores of scholars, researchers, and scientists with diversified professional and academic backdrops that constitute a vibrant research community that are beneficiaries of e-libraries services directly or indirectly (Ioannidis, 2005).

There is a growing realization amongst the policymakers that no country can achieve its development agenda without developing, empowering, and harnessing the potential of its young people. Consequently, governments across the globe tend to chalk out different policies, programs, projects, strategies, and initiatives aimed at providing enabling environments to their youth so that they may be able to take the charge of their lives and make a difference in their communities being effective and responsible citizens. Keeping in view the objectives, functions, and facilities provided by e-libraries, it becomes evident that e-libraries have the utmost role and capacity to develop young people of today for the leadership roles of tomorrow. Today's youth presents an unprecedented potential provided that its energies are channelized positively. But unfortunately, young people in Pakistan have never been on the priority list of the policymakers despite the myriad of problems faced by this cohort. It is high time that the youth was given their due space and equal opportunities through different schemes and programs as in the context of the Punjab E-Library Project (E-library, n. d.) in the country that can potentially develop young people.

Statement of the problem

The establishment of e-libraries is on the rise across the globe due to its instrumental role in promoting e-reading and e-learning activities, and providing self-development opportunities to its users. The youth, particularly the students, can utilize e-library services and resources to their greater advantage. A growing literature supports such a notion worldwide, but in the case of Pakistan, such linkage is missing. The Government of Punjab has taken a lead to launch the Punjab E-Library Project (PELP) under the auspices of the Punjab Information Technology Board (PITB) (E-library, n. d.). But a general perception is that the project has not been implemented in true essence due to several bottlenecks. One of the critiques is that it has not been able to achieve its core objective of youth development.

Therefore, it necessitates to explore the role of e-libraries in youth development in the context of the PELP and thus help inform the policy decisions in this regard.

Research questions of the study

The purpose of this study is to explore the impact of e-libraries on youth development in Punjab, Pakistan. The study aims to address the following research questions:

RQ 1. Do e-libraries have an impact on youth development in the domains of education, health and well-being, employment, political participation and civic participation?

RQ 2. Is there a difference in the respondents' opinions about impact of e-libraries on youth development in the domains of education, health and well-being, employment, political participation, civic participation with respect to their gender and geographical background (i.e. rural, urban) ?

Literature review

Concept of e-library

There are multiple meanings associated with the term “digital library or e-library” as explained by Lucier (1995), Lynch and Garcia-Molina (1995), Borgman (1999) Zhao and Ramsden (1995), Bishop and Star (1996), Lyman, (1996) and Lesk (1997). A thorough analysis of the definitions given by these scholars informs that the terms e-library and digital library are used interchangeably. Further, it brings about two diverse perspectives i.e. one from the researchers' side and the other from the professionals/librarians. From a researcher's point of view, e-libraries are a collection of contents for an e-library user, whilst librarians emphasize rendering multiple services to the user communities. Hence, both views are not mutually exclusive. Because of its multidisciplinary nature, e-library's terminologies are flexible; hence establishing a universally accepted definition of the term is a hard nut to crack

(Anyim W. O., 2018). The e-library is often referred to as a ‘digital library, and ‘virtual library’ that stores its contents in electronic files (rather than paper, electronic versions, or other media) and makes them available electronically (Trivedi, 2010). It is meant for the dissemination of information services to the stakeholders in a timely fashion through automated channels. Further, the digitization of libraries has outperformed the concept of a traditional library containing a small number of reading materials confound in a four walls structure with limited access to its users (Wilensky, 1995).

Punjab e-library project

To revive and thrive the culture of reading and learning amongst the public at large and particularly in children, families, youth, and elderly people, the Punjab E-Library Project has been launched in Pakistan’s most populous province of Punjab. The Punjab Information Technology Board (PITB) has established e-libraries in twenty districts across the province, and the scope of the project will be extended to all public and university libraries in Punjab. For provisioning virtual access to different library materials, these libraries are linked to a central digital platform (called Central Digital Library) at the Data Centre of PITB in Lahore. This single platform gives users access to basic e-books, e-journals, e-theses, documentaries, audio-visual materials, e-magazines, national and international e-newspapers, reference materials, data sources, and hundreds of indigenous documents. A Union Catalogue facilitates and encourages the exchange of digital library contents among twenty e-libraries (E-library, n. d.).

Youth development

Youth is a heterogeneous construct yet there’s no universally agreed definition of youth. The United Nations General Assembly describes youth as “young people ages between 15-24” (United Nations, n. d.), while the Commonwealth of Nations views youth as

“the persons between the ages bracket of 15 to 29 years” (The Commonwealth, 2021). The National Youth Policy of Pakistan (2009) considers youth as “people between the ages of 15 and 29” (Bhutto, 2008). In today’s arena, youth has captured a central stage in policy debates, development programs’ planning, and execution due to its instrumental role in achieving the desired ends through their unprecedented energy and potential. Youth development has been considered a priority area for all stakeholders and they consider that no development agenda can see the light of the day without harnessing the potential of young men and women. The terms ‘youth development’ and ‘youth empowerment’ are used interchangeably.

The Commonwealth Secretariat (2016) describes youth development as,

“enhancing the status of young people, empowering them to build on their competencies and capabilities for life. It will enable them to contribute to and benefit from a politically stable, economically viable, and legally supportive environment, ensuring their full participation as active citizens in their countries”.

The Punjab Youth Policy 2012 considers YD as,

“the phase of physical, emotional, spiritual, and intellectual growth, between the age cohorts of 15 to 29 years when youth actively pursue to develop attitude, skills, knowledge, and competencies to realize their potential and strength at the optimal level for the well-being of themselves, their family, communities and the country (Khan H. A., 2012).

The process of encouraging young people by all means and resources is aimed at revamping their quality of life so that they become confident enough to transform their lives and communities (YE, 2019).

Youth development and e-libraries

In the contemporary world, the role of e-libraries has been widely acknowledged to promote the youth development. According to a study, five cross-cutting themes may help achieve the youth development agenda that includes “*learning (developing positive basic and applied academic attitudes, skills, and behaviors), thriving (developing physically healthy attitudes, skills, and behaviors), connecting (developing positive social attitudes, skills, and behaviors), working (developing positive vocational attitudes, skills, and behaviors), and leading (developing positive civic attitudes, skills, and behaviors)*” (Ferber, Pittman, & Marshall, 2002).

Youth development is best achieved when the socio-ethical, physical, emotional, and cognitive competencies of the young people are focused to be advanced (Eccles & Gootman, 2002). Many young people have made significant use of digital platforms to transform their lives and the communities to which they belong. To be active citizens of a country, they need to be heard, to be included in policymaking processes, and to be provided with windows of opportunity. If young people are not well-versed with the issues, it would not be possible for them to come up with some viable and creative solutions (Roth & Brooks-Gunn, 2003).

Measuring youth development

As far as the conception of youth development is concerned, it is heartening to note that much research work is being carried out aiming at channelizing the youth energies for the socio-economic uplift of the communities. But little work has been done in the domain of library and information sciences. Several measurement scales and instruments have been developed that employ certain indicators to measure youth development. However, the main work in this regard has been done by the United Nations and other entities working in the development sector (United Nations, n. d.).

One of the famous models of youth development was presented by Lerner and Al (2005) emphasizing the six C's i.e. competence, connection, character, confidence, caring, and contribution for positive youth development. Likewise, several positive youth development scales were developed for measuring the level of youth development in different contexts and dimensions. However, the current study employs thematic expressions or domains of the youth development index, developed by the Commonwealth Secretariat, as proxies to develop constructs for the survey questionnaire. The index assesses the needs and challenges vis-à-vis opportunities for young people to thrive. It also informs policymakers in formulating evidence-based policies for developing youth capacities through the provision of enabling environments. The index is a composite measure of progress spanning over five key themes or domains: education, health and well-being, employment and opportunity, political participation, and civic participation (Commonwealth, 2013). These domains are briefly described in the following sections.

Education

There is no denying the fact that education plays an important role rather serves as bedrock in every developmental intervention. It spans over all three aspects of youth development i.e., social, economic, and political empowerment of young people. Being the first domain in the YDI, it ranks 183 countries of the world how well they are performing and delivering on this basic right to the future generations living under their territorial jurisdictions. It measures such indicators as access to educational facilities and their quality, enrolment ratios, etc. This domain provides support for other domain outcomes like health and wellbeing, employment and opportunity, participation, and a civic sense among young men and women (Commonwealth, 2013).

Health and well-being

Health and well-being are the basic rights of every person. This domain ranks the countries how well they are taking care of their young cohort with regards to physical care, as well as catering to their emotional and mental well-being without any discrimination for rural and urban areas. It also assesses the provision of healthier practices that promote healthy behaviors among the young lot with a lasting impact on their forthcoming lives (Commonwealth, 2013).

Employment and opportunity

The provision of equality of opportunity is the responsibility of the states across the globe but at the same time, it's the responsibility of the young people to get an appropriate skills-set and polish it through continuous learning and development. This is the only way through which youth can benefit from different windows of opportunities offered by the government and private sectors in an economy. This domain seeks to measure the different opportunities being provided to the young generation, and job situations. It also analyzes different avenues or offerings through which the youth is upskilled to take on the future workforce challenges of the globe (Commonwealth, 2013).

Political participation

Political participation refers to the degree of interest young people take in decision-making affecting their lives. This domain analyzes the conducive environment and encouragement being provided to the youth of a country so that they can have an appropriate representation as well as say in the policymaking. At the same time, it also seeks to measure the actuality of the political engagement of the youth. Only empowered and well-informed youth can contribute to the political spheres of a community and can establish their

effectiveness in affecting the political processes and institutions. They can also make a good choice among the political candidates through elections (Commonwealth, 2013).

Civic participation

Young people account for a major portion of volunteers in any society. Such a spirit of sacrifice and making contributions towards the betterment and uplift of the society largely depend upon civic engagement and healthy citizenship values. This very domain of the youth development entails the avenues for youth engagement in meaningful engagement in community work and how well they contribute towards their community development. As compared to other domains of the index, this domain can be difficult to measure given the non-availability of the objective indicators. However, youth engagement in different societal events, sports activities, music galas, fundraising drives, blood donation camps, participation in religious events, running voluntary campaigns against prevailing social evils like corruption, bribery, environmental pollution, gender discrimination, etc., can provide a thorough insight into this domain (Commonwealth, 2013).

Research methodology

The study adopted the quantitative research method to address the research questions. A structured questionnaire was developed to explore the impact of e-libraries on youth development in the five domains as given by the Youth Development Index of the Commonwealth (i.e. D1-Education, D2-Health and Well-Being, D3- Employment, and D4-Political Participation, and D5-Civic Participation) (Commonwealth, 2013). The necessary quantitative data was collected from users (young persons aged between 15-19 years) of four e-libraries established under the Punjab E-Library Project in South Punjab, Pakistan i.e. E-Library Bahawalpur, E-library Rahim Yar Khan, E-Library Multan, and E-Library Vehari by employing the convenience sampling technique.

Data analysis

The data collected through the questionnaire has been analyzed by using IBM SPSS, Statistics, Version 21. The descriptive statistics (i.e. means, frequencies, percentages, and standard deviation values) have been used to analyze and describe the data. The data are analyzed and presented under the following sections.

Response rate

Out of 400 respondents who were delivered the questionnaires, 301 respondents filled and returned the questionnaire with a response rate of around 75%. Amongst these 301 respondents, the majority of the respondents 92 (30.5%) belonged to e-library Vehari, 81 (27.0%) to e-library Bahawalpur, 70 (23.2%) to e-library Multan and 58 (19.3%) to e-library Rahim Yar Khan (Table 1).

Table 1: Response rate (N = 301)

Name of e-library	Frequency	Percentage
E- Library Vehari	92	30.5
E- Library Bhawalpur	81	27.0
E- Library Multan	70	23.2
E- Library Rahim Yar Khan	58	19.3
Total	301	100.0

Profile of the respondents

Among 301 respondents, 221 (73.4 %) respondents were male and 80 (26.6%) were female. As far as age groups of the respondents is concerned, the majority of the respondents 182 (60.5%) were between 21-25 years of age, 75 (24.9%) were between 15-20 years of age,

and 44 (14.6%) were between 26-29 years of age. Out of 301 respondents, the majority of the respondents 125 (41.5%) were Master's students, 91 (30.2%) were studying at the undergraduate level, 43 (14.3%) at intermediate level, 39 (13.0 %) were M.Phil students and 3 (1.0 %) were Ph.D. students. Amongst 301 respondents, 157 (52.2 %) respondents hailed from rural areas, while 144 (47.8%) were from urban backgrounds (Table 2).

Table 2: Profile of the respondents (N=301)

<i>Variables</i>	<i>Frequency</i>	<i>Percentage</i>
Gender		
Male	221	73.4
Female	80	26.6
Age group		
21-25 Years	182	60.5
15-20 Years	75	24.9
26-29 Years	44	14.6
Level of study		
Master	125	41.5
Undergraduate	91	30.2
Intermediate	43	14.3
MPhil	39	13.0
PhD	3	1.0
Geographical location		
Rural	157	52.2
Urban	144	47.8

Impact of e-library on youth development

The respondents were asked to give their opinions about impact of the e-library on youth development in the domains of education, health and well-being, employment, political participation and civic participation by using a five-point Likert scale (1=Strongly disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly agree). The respondents' responses are described under the following headings.

Education

The respondents were asked a set of four statements to record their responses regarding the impact of e-library (EL) on youth development in the education domain. Most

of the participants agreed that EL positively affects youth literacy rate (M=3.90, SD=.817). The respondents also agreed that EL encourages modern technology usage among the youth (M=3.87, SD=.889), incentivizes the efforts towards a knowledge-based economy (M=3.72, SD=.902) and enables youth to outperform in their educational and research endeavors (M=3.69, SD=.854) (Table 3).

Table 3: Impact of e-library on youth education

Statements	N	Mean	SD
EL positively affects youth literacy rate	301	3.90	.817
EL encourages modern technology usage among the youth	301	3.87	.889
EL incentivizes the efforts towards a Knowledge-based economy	301	3.72	.902
EL enables youth to outperform in their educational and research endeavors	301	3.69	.854

T-test was performed to determine the difference between the viewpoints of male and female participants about the impact of EL on youth development in the domain of education. No significant difference between the viewpoints of male and female participants was found about the impact of e-library on youth development in the education domain with the significant value of 0.967 (Table 4).

Table 4: Result of t-test regarding respondents' opinions about impact of e-library on youth development in the education domain with respect to gender

Statement	N	Gender	Mean	T	Sig.
Impact of EL on education	221	Male	3.80	-.042	.967
	80	Female	3.80		

To determine the difference of opinions between the participants of rural and urban areas about the impact of EL on the educational domain of youth development, a T-test

was performed. The result of the t-test underscores that there is a statistically significant difference between the opinions of participants hailing from rural and urban areas regarding the impact of EL on the youth education with the significant value of .002 (Table 5).

Table 5: Result of t-test regarding respondents' opinions about impact of e-library on youth development in the education domain with respect to area

Statement	N	Area	Mean	T	Sig.
Impact of EL on education	157	Rural	3.91	3.111	.002
	144	Urban	3.67		

Health and well-being

The study respondents were asked a set of four statements to record their responses regarding the impact of EL on youth development in the health and well-being domain. Most of the respondents agreed that EL helps youth to adopt a moderate lifestyle (M=4.03, SD=.820). The respondents agreed that EL promotes reading habits among youth (M=3.95, SD=.835), makes youth aware about the hazardous effects of social ills like corruption, tobacco usage, etc. (M=3.91, SD=.936), and inculcates ethical behavior among youth (M=3.90, SD=.881) (Table 6).

Table 6: Impact of e-library on youth health and well-being

Statements	N	Mean	SD
EL helps youth to adopt a moderate lifestyle	301	4.03	.820
EL promotes reading habits among youth	301	3.95	.835
EL makes youth aware of the hazardous effects of social ills like corruption, tobacco usage, etc.	301	3.91	.936
EL inculcates ethical behavior among youth	301	3.90	.881

T test was performed to determine difference between the opinions of male and female participants about the impact of EL on youth development in the health and well-being domain. There was no significant difference between the opinions of male and female participants regarding the impact of EL on youth development in the health and well-being domain with the significant value of .334 (Table 7).

Table 7: Result of t-test regarding respondents' opinions about impact of e-library on youth development in the health and well-being domain with respect to gender

Statement	N	Gender	Mean	T	Sig.
Impact of EL on health & well-being	221	Male	3.97	-0.970	.334
	80	Female	3.89		

T-test was performed to determine difference between the opinions of participants belonging to rural and urban areas about the impact of EL on youth development in the health and well-being domain. There is a statistically significant difference between the viewpoints of the participants hailing from rural and urban regarding the impact of EL on youth development in the health and well-being domain as the value of p is .033, which is less than the significant value of .05 (Table 8).

Table 8: Result of t-test regarding respondents' opinions about impact of e-library on youth development in the health and well-being domain with respect to area

Statement	N	Area	Mean	T	Sig.
Impact of EL health & well-being	157	Rural	4.03	2.937	.033
	144	Urban	3.86		

Employment

The respondents were asked a set of four statements to record their responses about the impact of EL on youth development in the employment domain. The majority of the respondents agreed that EL builds youth's capacity for future professional challenges (M=3.72, SD=.869). The participants also agreed that EL equips young people with the requisite skills to get a gainful employment (M=3.70, SD=.901), opens new job avenues for youth like freelancing (M=3.67, SD=.987), and assists youth to learn modern tools and techniques necessary for the job market (M=3.63, SD=1.064) (Table 9).

Table 9: Impact of e-library on youth employment

Statements	N	Mean	SD
EL builds youth's capacity for future professional challenges	301	3.72	.869
EL equips young people with the requisite skills to get a gainful employment	301	3.70	.901
EL opens new job avenues for youth like freelancing	301	3.67	.987
EL assists youth to learn modern tools and techniques necessary for the job market	301	3.63	1.064

T-test was performed to determine the difference between the opinions of male and female participants about the impact of EL on youth development in the employment domain. In this regard, no significant difference between the opinions of male and female participants was found with the significant value of .479 (Table 10).

Table 10: Result of t-test regarding respondents' opinions about impact of e-library on youth development in the employment domain with respect to gender

Statement	N	Gender	Mean	T	Sig.
Impact of EL on employment	221	Male	3.70	.709	.479
	80	Female	3.63		

T-test was performed to determine the difference between the viewpoints of the participants hailing from rural and urban areas about the impact of EL on youth development in the employment domain. There is a statistically significant difference in the opinions of the respondents from rural and urban areas as the value of p is .001, which is less than the significant value of .05. (Table 11).

Table 11: Result of t-test regarding respondents' opinions about impact of e-library on youth development in the employment domain with respect to area

Statement	N	Area	Mean	T	Sig.
Impact of EL on employment	157	Rural	3.84	3.596	.001
	144	Urban	3.51		

Political participation

The respondents were asked a set of four statements to record their opinions about their level of agreement with the impact of EL on youth development in the political participation domain. Most of the respondents agreed that EL promotes democratic values among youth (M=3.81, SD=.929). The respondents also agreed that the EL enables youth to have a say in decisions affecting their lives (M=3.76, SD=.853), empowers youth with political knowledge and awareness (M=3.71, SD=.847), and encourages youth participation in political dialogue (M=3.67, SD=.903) (Table 12).

Table 12: Impact e-library on youth political participation

Statements	N	Mean	SD
EL promotes democratic values among youth	301	3.81	.929
EL enables youth to have a say in decisions affecting their lives	301	3.76	.853
EL empowers youth with political knowledge and awareness	301	3.71	.847
EL encourages youth participation in political dialogue	301	3.67	.903

T-test was performed to determine the difference between opinions of male and female participants regarding the impact of EL on youth development in the political participation domain. In this regard, no significant difference in views of male and female participants was found with the significant value of .506 (Table 13).

Table 13: Result of t-test regarding respondents' opinions about impact of e-library on youth development in the political participation domain with respect to gender

Statement	N	Gender	Mean	T	Sig.
Impact of EL on political participation	221	Male	3.76	.667	.506
	80	Female	3.69		

T-test was also performed to determine the difference between the opinions of participants from rural and urban areas about the impact of EL on youth development in the political participation domain. No significant difference between the opinions of participants belonging to rural and urban areas was found in this regard, with the significant value of 0.83 (Table 14).

Table 14: Result of t-test regarding respondents' opinions about impact of e-library on youth development in the political participation domain with respect to area

Statement	N	Area	Mean	T	Sig.
Impact of EL on political participation	157	Rural	3.80	1.739	0.83
	144	Urban	3.67		

Civic participation

The respondents were asked a set of four statements to record their responses about their level of agreement with the impact of EL on youth development in the civic participation domain. Most of the respondents agreed that EL promotes volunteer spirit among the youth (M=3.77, SD=.877). The respondents also agreed that EL nourishes a culture of tolerance and respect for diversity (M=3.77, SD=.864), creates a civic sense among youth to positively contribute towards the society (M=3.68, SD=.843), provides youth with equal development opportunities (M=3.66, SD=.879) (Table 15).

Table 15: Impact of e-library on youth civic participation

Statements	N	Mean	SD
EL promotes volunteer spirit among the youth	301	3.77	.877
EL nourishes a culture of tolerance and respect for diversity	301	3.77	.864
EL creates a civic sense among youth to positively contribute toward the society	301	3.68	.843
EL provides youth with equal development	301	3.66	.879

T-test was performed to determine the difference between the responses of male and female participants about the impact of EL on youth development in the civic participation domain. No significant difference between the opinions of male and female participants was found in this regard with the significant value of 0.678 (Table 16).

Table 16: Result of t-test regarding respondents' opinions about impact of e-library on youth development in the civic participation domain with respect to gender

Statement	N	Gender	Mean	T	Sig.
Impact of EL on civic participation	221	Male	3.71	-.416	.678
	80	Female	3.75		

T-test was also performed to determine the difference between the viewpoints of participants from rural and urban areas about the impact of EL on youth development in the civic participation domain. There is a statistically significant difference between the opinions of participants hailing from rural and urban areas in this regard, as the value of p is .007 which is less than the significant value of .05 (Table 17).

Table 17: Result of t-test regarding respondents' opinions about impact of e-library on youth development in the civic participation domain with respect to area

Statement	N	Area	Mean	T	Sig.
Impact of EL on civic participation	157	Rural	3.82	2.696	.007
	144	Urban	3.61		

Findings of the study

The major findings of the study with relation to the research questions are described as follows:

R.Q1. Do e-libraries have an impact on youth development in the domains of education, health and well-being, employment, political participation and civic participation?

The findings of the study reveal that e-libraries have a significant impact on youth development in all the five domains, i.e. education, health and well-being, employment, political participation, civic participation as the respondents showed their agreement with all

the statements relating to the impact of e-libraries on youth development in the above mentioned five domains.

R.Q2. Is there a difference in the respondents' opinions about impact of e-libraries on youth development in the domains of education, health and well-being, employment, political participation, civic participation with respect to their gender and geographical background (i.e. rural, urban)?

The results of the study show that there was no significant difference between the opinions of male and female participants regarding the impact of e-libraries on youth development in all the five domains, i.e. education, health and well-being, employment, political participation, and civic participation. Whereas, a significant difference between the viewpoints of participants hailing from rural and urban backgrounds about the impact of e-libraries on youth development in four domains i.e. education, health and well-being, employment, and civic participation was found.

Discussion

The findings suggest that e-libraries have a significant positive impact on youth development as it was agreed and informed by the majority of the respondents. All the respondents acknowledged the multidimensionality of the e-libraries on holistic uplift and advancement of youth capabilities in all three aspects of human life i.e. social, economic, and political. The respondents agreed that e-libraries bring positive results with regard to five domains of the youth development index that have been used as a proxy to gauge the youth opinions about the impact of e-libraries on youth development.

The results show that the respondents agreed that the educational advancement is very much dependent on the effective e-library services that prepare the youth to make headway in this domain while preparing them to take on future challenges through the latest techniques

and scientific knowledge. Further, the positive health effects can also be attributed to the e-library services because such set-ups provide an effective platform for youth to develop reading habits and spend their leisure time in productive activities rather than indulging in different social ills. Hence, it plays a significant role in promoting healthy behaviors among youth and advancing their well-being. Furthermore, e-libraries equip youth with such skills that help them to tackle the personal and professional challenges in their future lives. It also builds their capacity to make better decisions and informed opinions about different happenings surrounding their lives. However, a small portion of the respondents did not agree with this stance. Being the largest part of the country's population, youth has a significant impact on a nation's political life. The majority of the respondents viewed that e-library helps create a political understanding and awareness among its beneficiaries that would translate into well-informed leaders of tomorrow. The youth would participate in different political processes and decision-making forums when they have the requisite knowledge of political systems and processes which can be acquired using e-library resources. Likewise, there are positive indications that they can play a productive role in community services and overall nation-building. Several activities like awareness sessions and seminars on different social and ethical issues may inculcate a spirit of civic engagement amongst young people that would enhance their participation, volunteerism and help them become responsible citizens of the state. In sum, the results reveal that the e-libraries serve as the cornerstone towards positive youth development that in turn can yield positive youth contribution towards socio-economic and political advancement of the country.

Conclusion

The study adopted the quantitative research method to address the research questions. A questionnaire was developed by using the Youth Development Index of the Commonwealth

(Commonwealth, 2013) in order to explore the impact of e-libraries on youth development. The necessary quantitative data was collected from users (young persons aged between 15-19 years) of four e-libraries in Punjab, Pakistan. The findings suggest that the e-libraries had a significant positive impact on youth development as it was agreed and informed by the majority of the respondents. The respondents agreed that e-libraries bring positive results concerning the five domains of the Youth Development Index. It was also reflected that educational advancement is very much dependent on the effective e-library services that prepare the youth to make headway in this domain. It also builds their capacity to make better decisions and informed opinions about different happenings surrounding their lives. Several activities like awareness sessions and seminars on social issues may inculcate a spirit of civic engagement amongst young people that would enhance their participation, volunteerism and help them become responsible citizens of the state. Overall, the respondents viewed that e-libraries help create a political understanding, social responsiveness, and awareness among its beneficiaries that would translate into well-informed leaders of tomorrow. In sum, e-libraries serve as the cornerstone towards positive youth development that in turn can yield positive youth contribution towards socio-economic and political advancement of the country provided that such projects may be implemented with true letter and spirit following a well-thought-out sustainability path. The findings of the study have implications for the government authorities, the e-library administration and library professionals in justifying resources, identifying users' needs with special reference to the youth, and improving resources and services in the e-libraries.

Recommendations

Based on the findings and conclusion of the study, the following recommendations are made:

1. The Government of Punjab should recruit trained and experienced library and information science professionals on competitive salary packages. Their job should be to teach library users how to use e-library resources and services effectively. The library staff should co-operate with the users in accessing electronic resources and services in an efficient and friendly manner.
2. The capacity building of the library staff should be followed rigorously. It should be a permanent feature of any e-library. The libraries must arrange regular training workshops and refresher courses relevant to e-libraries for the staff in order to equip them with necessary skills to handle the e-libraries.
3. There must be a continuous effort to expand the electronic information resources, and sitting spaces in the library for finding information from electronic resources. Moreover, information resources should be timely advanced, and progressive according to the requirements of the users.
4. High-speed computer systems and the Internet should be available in computer labs of the e-libraries to facilitate the young people in their endeavors.
5. E-libraries should organize advanced information literacy programs to create awareness among the youth, (especially among females as their ratio is very low regarding usage of e-libraries) about the importance of resources and services of e-libraries. For that purpose, e-libraries should go for building partnerships and sign MoUs with educational institutions and community-based organizations.
6. The libraries should arrange such activities (seminars, workshops, awareness sessions) relating to all the five domains, i.e. education, health and well-being,

employment, political participation, and civic participation of Youth Development Index for the young users that contribute to their development.

Delimitation of the study

The study respondents comprise young users (aged between 15-29 years) of four e-libraries developed under the PELP in South Punjab, Pakistan i.e. E-Library Bahawalpur, E-Library Rahim Yar Khan, E-Library Multan, and E-Library Vehar.

Reference

- Al-Saleh, Y. N. (2004). Graduate Students' Information Needs From Electronic Information Resources In Saudi Arabia. *Florida State University Libraries*.
- Alison, Kinengyere Annet; Kiyingi, George William; & Baziraake, Bernard Bamuhiiga. (2012). Factors Affecting Utilization of Electronic Health Information Resources In Universities In Uganda
- Anyim, W. O. (2018). E-Library Resources And Services: Improvement And Innovation Of Access And Retrieval For Effective Research Activities In University E-Libraries In Kogi State Nigeria. *Library Philosophy And Practice*.
- Arms, W. (2005). Digital Libraries. New Delhi.
- Bashir, M. S. (2011). Information And Communication Technology Development In Malaysia: Influence Of Competency Of Leaders, Location, Infrastructures, And Quality Of Services On Telecentre Success In Rural Communities Of Malaysia. *Australian Journal Of Basic And Applied Science*, 5(9), 1718–1728.

- Bashir, M. S., & Samah, B. A. (2011). Information And Communication Technology Development In Malaysia: Influence Of Competency Of Leaders, Location, Infrastructures, And Quality Of Services On Telecentre Success In Rural Communities Of Malaysia. *Australian Journal Of Basic And Applied Sciences*, 5(6), 1718-1728.
- Bhatti, R. (2007). User Education Programme In The John Rylands University Library Of Manchester: A Case Study. *Pakistan Journal Of Library & Information Science*(8), 49.
- Bhutto, S. H. (2008). *National Youth Policy*. Government Of Pakistan Ministry Of Youth Affairs Islamabad.
- Bamgbade, B. J. Akintola, B. A. (2015). Comparative Analysis And Benefits Of Digital Library Over Traditional Library: *World Scientific News*, 7(1), 2392-2192
- Bishop, A. P., & Star, S. L. (1996). Social Informatics Of Digital Library Use And Infrastructure. *Annual Review Of Information Science And Technology (ARIST)*, 31, 301-401.
- Borgman, C. L. (1999). What Are Digital Libraries? Competing Visions. *Information Processing & Management*, 35(3), 227-243.
- Borrego, À. (., Anglada I De Ferrer, L. M., Barrios, M., & Comellas, N. (2007).
- Borrego, À. (., Anglada I De Ferrer, L. M., Barrios, M., & Comellas, N. (2007). Use And Users Of Electronic Journals At Catalan Universities: The Results Of A Survey. *The Journal Of Academic Librarianship*, 33(1), 27.
- Borrego, À. (., Anglada I De Ferrer, L. M., Barrios, M., & Comellas, N. (2007). Use And Users Of Electronic Journals At Catalan Universities: The Results Of A Survey. *The Journal Of Academic Librarianship*, 33(1), 67-75.

- Bradburn, N. M., Sudman, S., & Wansink, B. (2004). *Asking Questions: The Definitive Guide To Questionnaire Design -- For Market Research, Political Polls, And Social And Health Questionnaires*, Retrieved From John Wiley & Sons.
- Bryman, A. (2004). *Social Research Method. 2nd Ed.* New York: Oxford University.
- Chirra, R., & Margam, M. (2009). Use Of Electronic Journals By Doctoral Research Scholars Of Goa University, India. *Library Hi Tech News*, 26(10), 12-15.
- Commonwealth (2013). *Youth Development Index*. Available at: [2013 YDI Results Report Eng1.pdf \(youthpolicy.org\)](#)
- Commonwealth (2020). *Global Youth Development Index Report*. Available at: [5023 V3 Book lores smaller.pdf \(thecommonwealth.org\)](#)
- Commonwealth Secretariat*. (2016). Retrieved From Fast Facts: The Youth Development Index: <https://thecommonwealth.org/sites/default/files/inline/fastfactsontheyouthdevelopmentindex.pdf>
- Creswell, J. W. (2003). An Expanded Typology For Classifying Mixed Methods Research Into Designs. In *Advanced Mixed Methods Research Designs* (Pp. 209–240).
- Creswell, J. W. (2003). *Research Design. (2nd, Ed.) Qualitative, Quantitative, And Mixed Methods Approach*.
- Digitallibrary.Edu.Pk.* (N.D.). Retrieved From <http://www.digitallibrary.edu.pk/>
- D. C. (1995). Going Digital. *A Look At Assumptions Underlying Digital Libraries*, 38(4).
- D. O. Agbenu¹, B. B., & H. O. Abubakar, C. O. (2015). Comparative Analysis And Benefits Of The Digital Library. *World Scientific News*, 24, 1-7.

- Dorner, D. G. (2004). The Impact Of Digital Information Resources On The Roles Of Collection Managers In Research Libraries. *Library Collections, Acquisitions, & Technical Services*, 249-274.
- E. G. (Ed.). (1998). Toward A Worldwide Digital Library. *COMMUNICATIONS OF THE ACM*, 41(4), 29–32.
- Eccles, J., & Gootman, J. A. (2002). Community Programs To Promote Youth Development. 427.
- E-library (n. d.). Available at: <https://elibrary.punjab.gov.pk>
- Feng, L., Jeusfeld, M. A., & Hoppenbrouwers, J. (2005). Beyond Information Searching And Browsing: Acquiring Knowledge From Digital Libraries. *Information Processing & Management*, 41.
- Ferber, T., Pittman, K., & Marshall, T. (2002). State Youth Policy: Helping All Youth To Grow Up Fully Prepared And Fully Engaged. *Forum For Youth Investment*, 48.
- Fox, E. A. (1993). *Source Book On Digital Libraries*. Computer Science Technical Reports.
- Fujitsu531. (2016). *Concepts Of Digitization And Digital Library*. Retrieved From Library & Information Science Network: <https://www.lisbdnetwork.com/concepts-digitization-digital-library/>
- G.Dorner, D. (2004). The Impact Of Digital Information Resources On The Roles Of Collection Managers In Research Libraries. *Library Collections, Acquisitions, And Technical Services*, 28(3), 249-274.

- Greenstein, D., & Thorin, S. E. (2002). The Digital Library: A Biography. In *Digital Library Federation*. Washington.
- Griffin, S. M. (1998). NSF/DARPA/NASA Digital Libraries Initiative. *D-Lib Magazine*.
- Hoq, K. M. (2015). Rural Library And Information Services, Their Success, Failure, And Sustainability: A Literature Review. *Information Development*, 31(3), 294-310.
- Index, Y. D. (2016). *Australian Youth Development Index: A Jurisdictional Overview Of Youth Development*.
- Ioannidis, Y. (2005). Digital Libraries At A Crossroads. *International Journal On Digital Libraries*, 5, 255–265.
- Israel, S. (2018). *Society For International Development*. Retrieved From Www.Sid-Israel.Org: <https://www.sid-israel.org/en/development-issues/what-is-development>
- Joint, N. (2005). Strategic Approaches To Digital Libraries And Virtual Learning Environments (Vles). *54(1)*, 5-9.
- Khan, H. A. (2012). *Punjab Youth Policy*. Government Of Punjab, Youth Affairs, Sports, Archaeology And Tourism Department.
- Kimberlin, C. L., & Winterstein, A. G. (2008). Validity And Reliability Of Measurement Instruments Used In Research. *American Journal Of Health-System Pharmacy*, 65(33), 2276–2284.
- Kumar, S., Kumar, D., & Raj, H. (2018). UNDERSTANDING THE IMPORTANCE OF LIBRARY AUTOMATION AND E-LIBRARY. 256-259.

- Krystyna K. Matusiak, I. (2016). Digitization Of Text And Still Images. In *Discover Digital Libraries Theory And Practice* (Pp. 59-93).
- Lamb, A., & Callison, D. (2006). Online Learning And Virtual Schools. *Key Words In Instruction, XXI(9)*, 29-35.
- Lerner, R. M. (2005). Positive Youth Development, Participation In Community Youth Development Programs, And Community Contributions Of Fifth-Grade Adolescents: Findings From The First Wave Of The 4-H Study Of Positive Youth Development. *The Journal Of Early Adolescence, 25(1)*, 17-71.
- Lerner, R. M. (2005). PROMOTING POSITIVE YOUTH DEVELOPMENT: THEORETICAL AND EMPIRICAL BASES.
- Lerner, R. M., & Al, J. V. (2005). Positive Youth Development, Participation In Community Youth Development Programs, And Community Contributions Of Fifth-Grade Adolescents: Findings From The First Wave Of The 4-H Study Of Positive Youth Development. *The Journal Of Early Adolescence, 25(1)*, 17-71.
- Linde, P. (2006). Introduction To Digital Libraries – Memex Of The Future.
- Lynch, C., & Garcia-Molina, H. (1996). Interoperability, Scaling, And The Digital Libraries Research Agenda. *Microcomputers For Information Management, 13(2)*, 85-132.
- Merriam-Webster Dictionary*. (1828). Retrieved From <https://www.Merriam-Webster.Com/Dictionary/Development#H1>
- Nations, U. (2015). *Youth Development Indicators*. Retrieved From Department Of Economic And Social Affairs: <https://www.Un.Org/Development/Desa/Youth/Youth-Development-Indicators.Html>

- News, G. (2016). *Pakistan Is Among The Worst Countries To Live In For Young People*. Retrieved From <https://www.geo.tv/latest/119806-pakistan-among-worst-countries-to-live-in-for-young-people>
- Okyere-Kwakye, E., & Nor, K. M. (2020). Examining The Intentions Of Ghanaian Technical University Students To Use E-Library. *Digital Library Perspectives*.
- PNHDR. (2018). *Pakistan National Human Development Report*. HUMAN DEVELOPMENT REPORTS.
- Pomerantz, J., & Choemprayong, S. (2015). The Development And Impact Of DL Funding In The United States. *31*.
- PROCIDA, A. B. (2016). Retrieved From www.aspeninstitute.org: <https://www.aspeninstitute.org/blog-posts/mean-empower-youth/>
- Punjab Information Technology Board And Sports Board Punjab*. (N.D.). Retrieved From <https://elibrary.punjab.gov.pk/resources>
- PYP. (2012). *Punjab Youth Policy*. Government Of Punjab, Youth Affairs, Sports, Tourism And Archaeology Department.
- Quaid-E-Azam Mazar Management Board (QMMB)*. (N.D.). Retrieved From <https://qmmmb.gov.pk/quotes-full.html>
- Rabie, M. (2016). Meaning Of Development. In *A Theory Of Sustainable Sociocultural And Economic Development* (Pp. 7-15).
- Ramzan, M. (2004). Levels Of Information Technology (IT) Applications In Muslim World Libraries. *The Electronic Library*, 22(3), 274-280.

- Robeyns, Byskov, I. A., & Fibieger, M. (2021). Author And Citation Information For "The Capability Approach". *Stanford Encyclopedia Of Philosophy*.
- Robeyns, Byskov, I. A., & Fibieger, M. (2021). The Capability Approach. In *Stanford Encyclopedia Of Philosophy*. Metaphysics Research Lab, Stanford University.
- Roes, H. (2001). Digital Libraries And Education: Trends And Opportunities. *D-Lib Magazine*, 7.
- Samsuddin, S. F., & Shaffril, H. A. (2019). ICT Usage At Rural Libraries: Does Positive Youth Development Exist? *Library Philosophy And Practice*.
- Secretariat, C. (2020). *Global Youth Development Index And Report*.
- Siyabonga Mhlongo, H. K. (2005). Flexing Digital Library Systems. 33–37.
- Schubert Foo, N. G. (2000). A Review Of The Status Of 20 Digital. *Journal Of Information Science*, 26(5), 337-355.
- The Challenge Of Sustainable Development*. (N.D.). Retrieved From Soas.Ac.Uk: https://www.soas.ac.uk/Cedep-Demos/000_P501_USD_K3736-Demo/Unit1/Page_12.Htm
- Theresa, A. U., & Jerome, I. O. (2010). The Role Of Digital Library In Law Research. *International Journal Of Library And Information Science*, 2(6), 108-113.
- Thioune, R. M. (2003). *Information And Communication Technologies For Development In Africa* (Vol. Opportunities And Challenges For Community Development). International Development Research Centre.

Trivedi, M. (2010). Digital Libraries: Functionality, Usability, And Accessibility. *Library Philosophy*, 381.

Trivedi, M. (2010). Digital Libraries: Functionality, Usability, And Accessibility. *Library Philosophy And Practice*.

Ugwu, C. I., & Onyegiri, D. C. (2013, June). Management Problems Of Electronic Information Resources: A Case Study Of UNN Library. *International Journal Of Library And Information*, 5(5), 126-133.

UN Documentation: Development. (N.D.). Retrieved From Research.Un.Org:
[Https://Research.Un.Org/En/Docs/Dev/Intro](https://Research.Un.Org/En/Docs/Dev/Intro)

United Nations. (N.D.). Retrieved From Peace, Dignity, And Equality:
[Https://Www.Un.Org/En/Sections/Issues-Depth/Youth-0/Index.Html](https://Www.Un.Org/En/Sections/Issues-Depth/Youth-0/Index.Html)

United Nations Development Programme. (N.D.). Retrieved From
[Https://Www.Undp.Org/Content/Undp/En/Home/2030-Agenda-For-Sustainable-Development/Peace/Governance/Empowering-Youth.Html](https://Www.Undp.Org/Content/Undp/En/Home/2030-Agenda-For-Sustainable-Development/Peace/Governance/Empowering-Youth.Html)

Yalman, M., & Kutluca, T. (2012). Future Of E-Libraries In Universities. *Social And Behavioral Sciences*, 47, 2225 – 2228.

YD. (N.D.). Toolkit_Annexf.Pdf. ANNEX F: REFERENCE SHEETS.

YE. (2019). Retrieved From Unnatibl: [Https://Medium.Com/@Unnatibl123/What-Is-Youth-Empowerment-And-What-Is-Importance-Ec3415b1c865](https://Medium.Com/@Unnatibl123/What-Is-Youth-Empowerment-And-What-Is-Importance-Ec3415b1c865)

Youth Development & Youth Leadership. (N.D.). Retrieved From
[Http://Www.Nasetalliance.Org/Youthdev/Index.Htm](http://Www.Nasetalliance.Org/Youthdev/Index.Htm)

Zhao, D. G., & Ramsden, A. (1995). Report On The ELINOR Electronic Library Pilot. *Information Services & Use*, 15(3), 199-212.