Bridging Gender Gap through Technology Based Distance Education: Assessing Mobile Phone and Internet Readiness Level

Amjad Ali Arain[1], Muhammad Uzair-ul-Hassan[2], Mehboob Ali Dehraj[3]

Abstract

Pakistani nation is one of the least literate nations in the world with very high gender parity; in some parts of Pakistan the female literacy rate is the lowest one in the world. This alarming situation is mainly due to the non-availability of and poor accessibility to education. In the era of scientific development this problem can be solved through the application of cost effective technologies. Accessibility to and utility of Information and Communication Technologies (ICTs) are on the rise in Pakistan therefore ICTs in distance education can play an effective role in bridging gender gap. This explanatory study had been designed to investigate into the existing trends and opportunities associated with the utilization of mobile phone and internet in open and distance learning (ODL) to promote female education in Pakistan and in the neighboring countries. Various indicators related to the mobile phone and internet were investigated in order to have an information and in-depth, to explore current trends and to find out practicable ways for the application of ICTs to enhance the accessibility of education for female gender. Quantitative data for this research was accessed from multiple resources: UNdata, the World Data Bank, International Telecommunication Union (ITU), Ministry of Education and Ministry of Communication, country reports, past studies and other useful resource. It was found that ICTs have strengthened significantly since the advent of 21st century. Mobile phones and internet density have also been increasing continuously. Pakistani society has already achieved mobile phone readiness level and internet base has also expanded significantly so it can be the high time to apply these technologies in distance education to achieve the gender parity in education at all levels.

Keywords: ICT, Gender, Open and distance learning (ODL), Education

Introduction

Education is a catalyst for economic change, an important input for growth and development of individuals and society (Longanecker, 2009), (Powersa & McDougall, 2005), (Johnstone, Arora, & Experton, 1998). According to the UN Declaration of Human Rights 1948 "*everyone has the right to education without any discrimination"* on the basis gender, geographical location or genetic belonging. Therefore states and societies at national and international levels have been endeavouring to improve equity based accessibility in education particularly at the basic level for last many decades. As a result many countries have achieved universal primary education rate but still there are a number of countries where the literacy rate is low and gender gaps are very high mainly due to the non-availability of and poor accessibility to education. According to the UNESCO report 124 million children of age 6 to 15 year are out of school and majority of them are female.

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In Pakistan the situation is very critical and alarming because it has the world's 2nd largest population of the out of school children after Nigeria, Africa. More than twenty four million children of age group 6 to 15 years are out of school and majority of them are female. During last two decades state and international actors took many initiatives to improve the enrolment at basic level but these initiatives could not be very helpful in bring out of school children into schools. In this context it is imperative to mobilise all available resources including Information and Communication Technologies (ICTs). Technology is independent of gender because research has found that there is no relation between gender and behavioral intention as far as the use of Information Technologies is concerned (Ng & Luk, 2018) .

Literature review

Digital engagement, through android base applications, is very helpful in accessing, approaching, linking and engaging in learning to sexual minorities. The digital technologies are cost-effective, result oriented and convenient as well (Lunn, 2019). Since the advent of new millennium, states and organization have been given considerable priority to the education. Millennium Development Goal (MDG) three and Education for All (EFA) Goal five are gender equality in education, employment and empowerment. Education is supporting education; improvement in literacy has helped achieve gender equity in education at all levels and the gap has been narrowing constantly but its pace is very slow (Lewis & Lockheed, 2006). According to the World Gender Gap Report 2010, total gender equality could not be achieved by any country (Hausmann, Tyson, & Zahidi, 2010). It shows that in the world, there are various tangible, intangible factors and forces that are opposing this change process aimed to promote gender equalizer property of education. In fact gender discrimination is not good for any society because it debars women from getting the right to equality, and basic human rights (Jones, Snelgrove, & Muckosy, 2006). Return to education, private and social, are high for male and female genders so it is important for both genders. Various research studies on women education have found that women have higher socio-economic efficiency, as compared to men, when investment in their education is analyzed on the long term basis (Schultz, 2002), (ILO, 2009), (Strauss & Thomas, 1995; King & Hill, 1998). As female human capital has a higher efficiency therefore equity and equality is basic requirement for socio-economic growth development. In fact, it is impossible to attain sustainable economic development without realizing gender equality all sectors particularly in education (Löfström, 2009). Furthermore diversity in courses and learning environment can be helpful in attracting and retaining female gender in distance education (Aruquia, 2018)

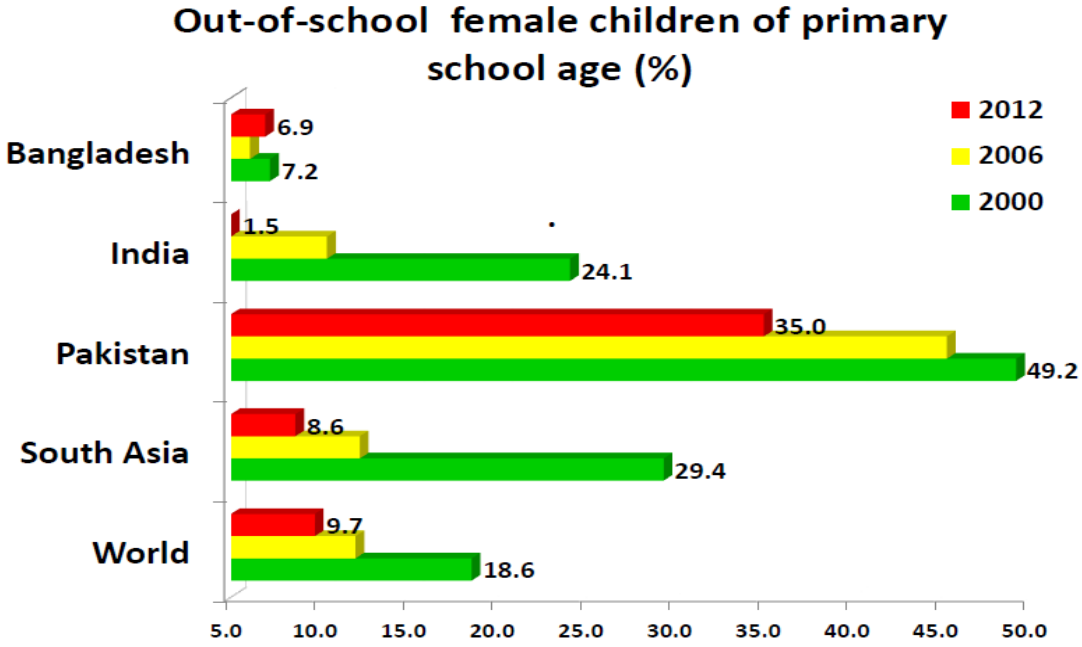
It is evident from the global data education; particularly higher education has proved itself as driver of positive change and mean of sustainable development in all parts of the world (UNESCO I. , 1998). At the same time education is an effective mean of human capital development with equity that leads to the quantitative increase of human capital, qualitative improvement of the working conditions, elevated efficiency and quality that ultimately brings durable socio-economic change. In this regard the type and quality of education particularly higher education available plays key role in meaningful change.

Twentieth century can rightly be tagged as *century of knowledge evolution and revolution*. During the second half of the century education at all levels expanded at an extraordinary rate particularly in the industrialized countries. The evolution of education particularly of higher education from *"elite service to mass accessible product"* has improved and enhanced its availability and all together it has transformed higher education into public

utility (Mitra, 2009). Furthermore fast means of transportation are contributing to the higher mobility of students at national and international levels. As a result student enrolment is increasing very rapidly and demand of quality education in all parts of the world is on the rise. In this regard biggest shift has been observed in Asia. According to the UNESCO data, in Asia, *education balloon* is growing constantly at an unprecedented rate. This region has long way to go as some of the countries are least female friendly where female illiteracy and gender gap at primary and secondary level is very high.

Today more than 4.2 billion inhabitants or 60% of the world population lives in Asia and half of it is female. Extreme social, political, cultural, economic and technological diversity prevails in this part of the world. Likewise prevalence of education is also not uniform; on the one hand there are high literate countries like Japan and South Korea and on the other hand there are least literate countries like Afghanistan and Pakistan. As of UNESCO statistics 2013 more than 59 million children of primary school age and 70 million children of lower secondary school age are out of school and a majority of these out of school children is female and lives in Asian countries.

Figure 1



This explanatory study had been designed to investigate into the existing trends and opportunities associated with the utilization of mobile phone and internet in formal and distance learning to promote female education in Pakistan and in the neighboring countries. Various indicators related to the mobile phone and internet were studies in order to have an in-depth investigation into the problem, to explore current trends and to find out practicable ways for the application of ICTs to enhance the accessibility of education for female gender. Quantitative data for this research was accessed from multiple resources: UNdata, the World Data Bank, International Telecommunication Union (ITU), Ministry of Education and Ministry of Communication, country reports, past studies and other useful resource.

Likewise less developed countries of East Asia and the Pacific and South and West Asia have very high dropout ratio at primary and lower secondary levels. In Asia, Pakistan has biggest share of out of school children and then comes India. According to the UNESCO data, in

Pakistan 35% female and 21% male children of primary school age do not go to school whereas for south Asia these figures are 8.6% & 6.1% respectively and the world average is 9.7% & 8%.

Table 1: Out-of-school rate for children of primary and lower secondary school age (%) 2012

	Primary		Lower secondary	
	Female	Male	Female	Male
World	9.7	7.9	18.6	17.8
South Asia	8.6	6.1	31.7	29.8
East Asia & Pacific	2.9	3.2	6.2	11.0
Arab World	16.4	11.2	20.3	15.7
Pakistan	35.0	21.0	62.1	51.6
India	1.5	1.2	N/A	26.1
Bangladesh	6.9	14.1	17.0	37.5
China	N/A	N/A	N/A	N/A
Iran	N/A	N/A	3.6	1.9
Thailand	10.6	10.0	8.5	9.9

Source: Table is based on data from UNESCO 2013

Likewise data on the enrolment rate at primary and secondary school in Pakistan presents a dismal picture as the transition rates, completion rates and school life expectancy is very low in this country. The situation is very grim for female gender on these indicators. In Pakistan school life expectancy from primary to secondary level for female and male gender is 6.2 years and 7.9 years respectively which are very low as compared to the world average of 10 years for female gender and 10.4 years for male gender. Similarly school life expectancy in Pakistan from primary to tertiary levels for female and male genders is only 6.6 years and 8.3 years which is four years and three and half years respectively below to the world average.

Table 2: School life expectancy in years (2012)

	Primary to secondary		Primary to tertiary	
	Female	Male	Female	Male
World	10.0	10.4	11.5	11.8
South Asia	9.2	9.8	9.9	10.7
East Asia & Pacific	10.8	10.6	12.4	12.1
Arab World	9.3	10.2	10.4	11.3
Pakistan	6.2	7.9	6.6	8.3
India	9.8	10.3	10.8	11.7
Bangladesh	7.8	7.7	N/A	N/A
China	10.8	10.3	12.2	11.6
Iran	11.2	11.5	13.7	13.9
Thailand	10.4	9.8	12.7	11.3
Japan	12.5	12.4	15.2	15.5

Source: Table is based on data from UNESCO 2013

Bangladesh and India which are located in the same region and share similar socio-economic and political conditions have much better condition of education as compared to that of Pakistan. China, Indonesia, Iran and Thailand are located in Asia but basic and higher education related indicators in these countries are very strong and have the values above the world average. Data on female education in Pakistan show that perhaps social and cultural environment in many parts of this country is not conducive for female gender and the government is not taking serious measures. Recent cases of the shooting of **Malala**, a Pakistani school girl, bombing of female schools in northern Pakistan, resistance to the female education in the name of culture and religion indicate in all parts of the country show that still there is need to put more efforts to create a female friendly environment in this country.

Per capita GDP in Pakistan, like many of the Asian countries, is below to the world average so the allocation of budget for education is only 2.1% of the GDP in this country. Under-invested education sector is resulting in an imbalance between demand and supply, low efficiency and questionable quality of education at all levels particularly at post-secondary or higher levels. Due to the shortage of resources and inequality in the opportunity to access contribute to the gender gap. Furthermore current trends in education shows that size of education at all levels in Pakistan, like many other parts of the world, will increase further in the future. As Pakistan has high population so development of human capital through education and training is of great importance. Consequently education system in Pakistan is faced with dual pressure; to meet with the increased demand of education and to bridge the widening gender gap at primary and secondary levels.

Table 3: GDP per capita (current US$)

	2000	2012
World	5301.0	10170.7
South Asia	449.3	1388.1
East Asia & Pacific	3952.8	9026.4
Arab World	2608.1	7017.7
Pakistan	514.2	1290.4
India	455.4	1489.2
Bangladesh	356.0	747.3
China	949.2	6091.0
Iran, Islamic Rep.	1536.7	6815.6
Thailand	1968.5	5473.7
Japan	37291.7	46720.4

Source: Table is based on data from The World Bank-2013

Open Distant Education is a suitable form of higher education due to its socio-economic advantages hence countries throughout the world has increased interest in it (UNESCO 1998). *Distance education* is an educational setting in which mostly learner and teacher are independent of time and space. O*pen learning* refers to "an organisational activity, based on the use of teaching materials, in which the constraints on study are minimised either in terms of access, or of time and place, pace, methods of study or any combination of these" (Yates & Tilson, 2000). Earlier to 1970s the word correspondence education was in vogue. The word Distance education was used in the first issue of the British Open University journal, *Teaching at a Distance* (1974:1, 35 and 55) in 1974 (Holmberg, 1995). As DOL mode of learning is flexible in time, space and age so it suitable to all particularly those who have limited mobility or time constrain due their economic activities, domestic preoccupation and cultural barriers. Higher education is not restricted to advanced level university education only but it includes all levels of post-secondary education in all domains and in all fields of life. Higher education, in the previous century, witnessed a huge transition from "purely private good to a public good" that ultimately led to its extension and expansion. In 1950 the participation rates at higher education level were 1% and 2% for female and male respectively and in 1970 these values reached at 4.5% and 7.5%.

It is evident that female had low enrollment rate as compared to the male during that period (Schofer & Meyer, 2005). But in 1970s and in the later decades the gender gap at higher education level started reducing very rapidly and by 1990, the gap had vanished away but soon, in various countries, another gender gap started emerging; female surpassed male in higher education. Today Female gender has outnumbered male gender on the basis of enrolment ratio at tertiary level in half of the world. This is putting special pressure on most of the academic systems which are already facing the dilemma of meet the challenges of expansion in enrollment and urgent need to support high-quality research establishments (Altbach, Reisberg, & Rumbley, 2009).

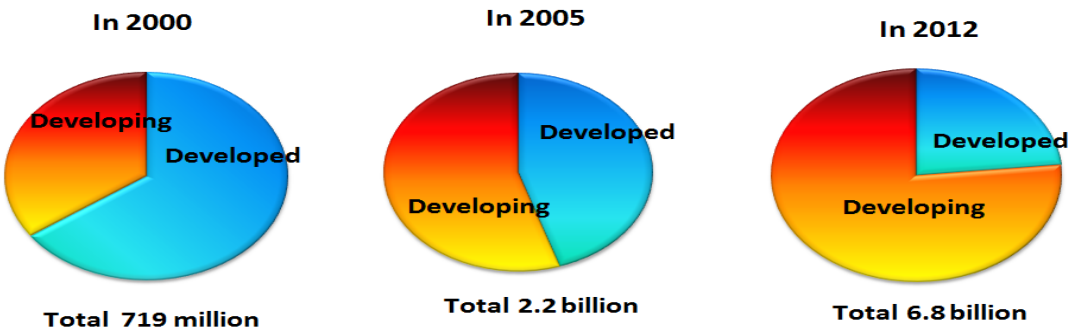
A characteristic of open and distance learning institutions is that they are deliberately designed and structured to make education affordable in terms of cost, time, accessibility and openness through the use of wide range of technologies. Although technology has affected all types of education and at all levels but it is evident that distance education as compared to conventional education makes use of technologies more efficiently, effectively and in a diverse manner (Bates, 2005). Technology can be helpful in reducing the dropout of female students enrolled in distance education programs because technology creates a flexible and personalized learning environment, serve their learning needs, reduces communication gap, and gives more autonomy (Vogel & Hochberg, 2018).

The form and format of distance education that is in vogue today had evolved during the 20^{th} century based on the technologies and facilities of that time. If we look at the history of distance learning then can see that this method of informal learning purely based on postal correspondence is many centuries old. Later on advent and invention of new technologies during the second half of the 20^{th} century influenced both formal and distance education and new technologies were introduced to assist teaching and learning process. Radio, TV, audio and video cassette were used along with the printed material in distance education to make the teaching and learning process effective and to enhance the efficiency of distance mode of delivery of education.

In this situation Open Distant education model is very appropriate and suitable; feasible and effective to improve the availability and accessibility of quality education for all with enhanced equity and equality. Interestingly, Open and Distant Education (ODE) require less human and financial resources whereas in a regular university education model more and more tangible and intangible resources are required i.e. buildings, laboratories, libraries and faculty. The problem of low participation rate of female gender is being solved by integrating modern technologies in distance and open mode of teaching and learning, at different levels of education. In this regard use of affordable technologies that are easily available and accessible for rural and urban population are of great importance.

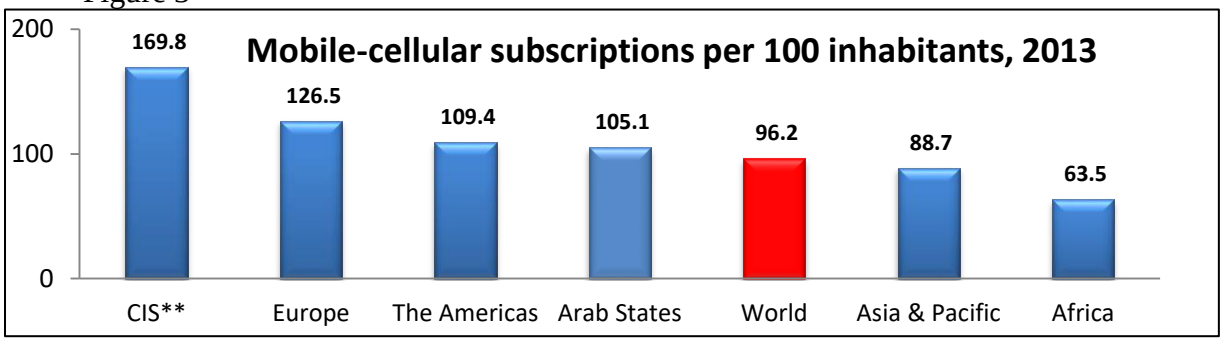
According to the International Telecommunication Union (ITU), United Nations specialized agency, data mobile phone subscription has continuously been increasing in the world. This increase is more robust in the developing countries; in 2000 there were 719 million mobile phone subscribers and majority of them were living in the developed or high income countries. But during last twelve years this technology expanded very rapidly and mobile phone subscriptions increased up to 6.8 billion and highest increase was witnessed in the developing countries; today more than 75% of the mobile phone subscribers are from the developing countries.

Figure 2



According to the ITU, mobile phone subscription in the world rose from 34 per 100 inhabitants in 2005 to 96 per 100 inhabitants in 2013. During the same period it grew from 23 to 88 per 100 inhabitants in Asia & Pacific region. In Pakistan it increased from 8 to 70 per 100 inhabitants, in India from during 8 to 76 and in Bangladesh from 6 to 68 per 100 inhabitants during 2005 and 2012.

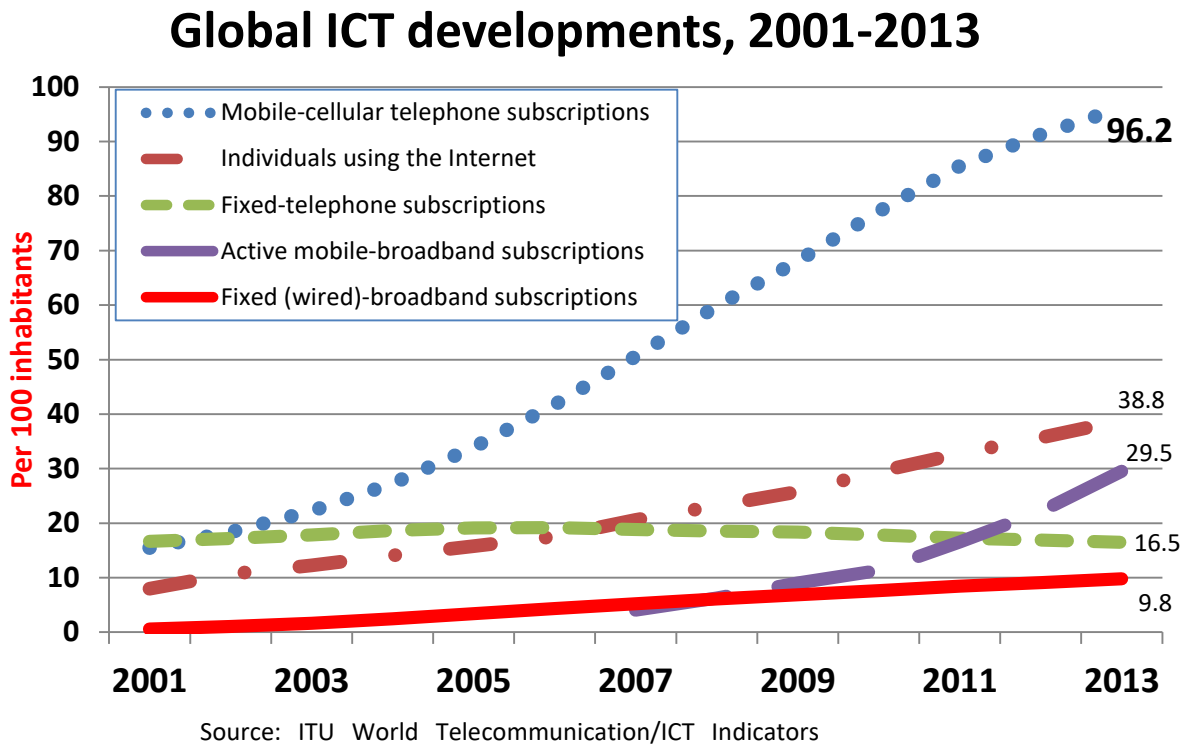
Figure 3



Likewise density of personal computers also increased in the world from 26.2 to 40.7 computers per 100 inhabitants from 2005 to 2013. In Asia & Pacific region this figure increased from 19.8 to 31 personal computers per inhabitants during the same period. Growth in the use of mobile phones and computers has supported the growth of broadband and mobile internet service. In the world fixed (wired) broadband subscription has continuously been increasing since the advent of 21st century; broadband subscription has increased from 3.4 to 9.8 subscriptions per 100 inhabitants in the world.

Similarly, during 2005-2013, the number of internet users rose from 16 to 38 per 100 inhabitants in the world while in Asia & Pacific it grew from 9.4 to 34 and in south Asia from 0.5 to 9.4 per 100 inhabitants. In Bangladesh, India and Pakistan the number of internet users as per 100 inhabitants grew from 0.1 to 5 in Bangladesh, 0.5 to 10.1 in India and 0.1 to 9 in Pakistan.

Figure 4



Thus it is evident that ICT related indicators have been strengthening in all Asian and Pacific countries so ICT readiness of Asia & Pacific society is improving very rapidly. A robust increase in the use of mobile phones, computers and internet has been observed since 21st century has begun. This positive development indicates preparedness and readiness of using ICTs in different sectors including education sector particularly in Open and Distance Learning (ODL). Today the use of internet in education is becoming very common around the world because it is a low cost, fast and vast mean of communication and information sharing. The immense development has given birth to e-commerce, e-banking, e-learning, e-government, etc. Today educational institutions, teachers, students are use mobile phones and internet in their professional and daily life. The use of different social media has become a common feature of 21st century life. The use of pervasive technologies like mobile phone and internet in Open and Distance Learning (ODL) is the most viable solution of the problems faced by education around the world. Cost effectiveness, higher accessibility, improved efficiency, equity, availability, quality, personalized learning, elevated teacher-taught virtual interaction, elimination of time and space constrain.

Old technologies like radio and TV have no match with newer technologies in terms of effectiveness (Harry & Khan, 2000). Traditional methods used in distance learning lack teacher-student and student-student interactivity that results in low motivation and reduced level of interest of learners (Gulati, 2008). e-learning does have the potential to meet the educational needs of masses of poor people in developing countries. The present IT provisions in developing countries is still limited to high and upper middle income groups countries (Gulati, 2008). Although digital divide is shrinking very rapidly at global level but for poor people the digital divide slowly. The prevalence of mobile phone has filled this vacuum very rapidly as mobile phone users in the less developed countries are growing more rapidly as compared to high

developed nations. Some Open and Distance Educational institution are shifting from conventional mode delivery methods to e-learning but many are not keeping the pace with the new development. A study of 150 distance education programs in sub-Saharan Africa has found that conventional distance learning continues to be more reliable, sustainable, and widely used than online and Web-based methods of learning (Berge & Leary, 2006). Similarly in the majority of the Open and Distance Universities conventional channels of communication are still in vogue.

Modern technologies have paved the way for new possibilities in the field of distant and open education. such technologies include; internet, multimedia, Tele-monitoring, online-meetings, Fax, SMS, MMS, LMS, e-library, e-books, e-mail, voice-chatting, video-conferencing and mobile phones. These modern technologies are making their way into distance and open education very rapidly because of two characteristics; cost effectiveness and high efficiency. In the developing countries of Asia-Pacific region these technologies are making their way even in the rural areas (UIS 2009). Research studies have shown that women and men, enrolled in distance education program, have different learning styles. Furthermore women are more likely to prefer 'support and connectedness' even when studying at a distance. Such learning styles rely on effective means of fast communication to contact with resource person and forming physical groups or social networks (Prümmer, 2000). Women's individual differences related to skills and life experiences have a strong effect on their academic and professional careers (Stoet, 2018).

The use of mobile phone and internet technology in open and distance mode of education can provide opportunities to women to further their education who cannot continue their education either for domestic, occupational, cultural or economic reasons. Open and distance education institutions should ensure that women have the same chances as men to succeed (Prümmer, 2000). Today, ODE programs have become a good opportunity for all to get quality higher education at their home or workplace without any mobility or migration for education. During last two decades technologies as advanced so rapidly that conventional educational institutions in general and distance education institutions in particular found it hard to keep the pace with the new development. Thus this rapid technological advancement is increasing the distance between technologies available and technologies used in distance education.

Conclusion

ICTs have strengthened significantly since the advent of 21st century. During the first decade of this century internet and cellular technology expanded and penetrated very rapidly in Asia & Pacific region akin to in other parts of the world. Mobile phones and internet density has increased significantly in this region. Pakistani society has already achieved mobile phone readiness level and internet base is also expanding rapidly so it is appropriate time to use these technologies in education to bridge gender gap and to achieve the gender parity in education at all levels. Furthermore the utilization of mobile phone and internet in formal and distance learning can be very helpful promoting accessibility, equality and equity in female education in Pakistan and in the neighboring countries.

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Figure 5

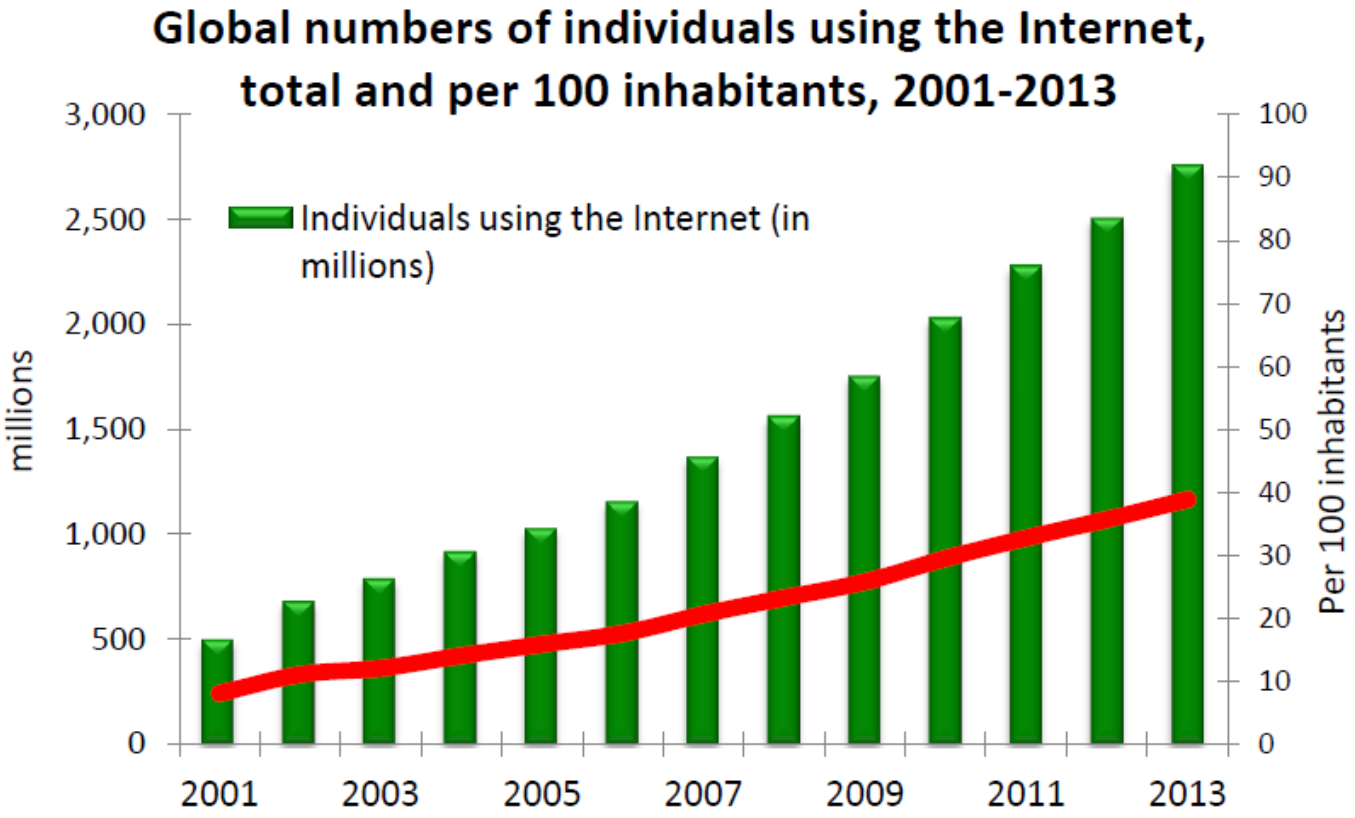

Figure 6

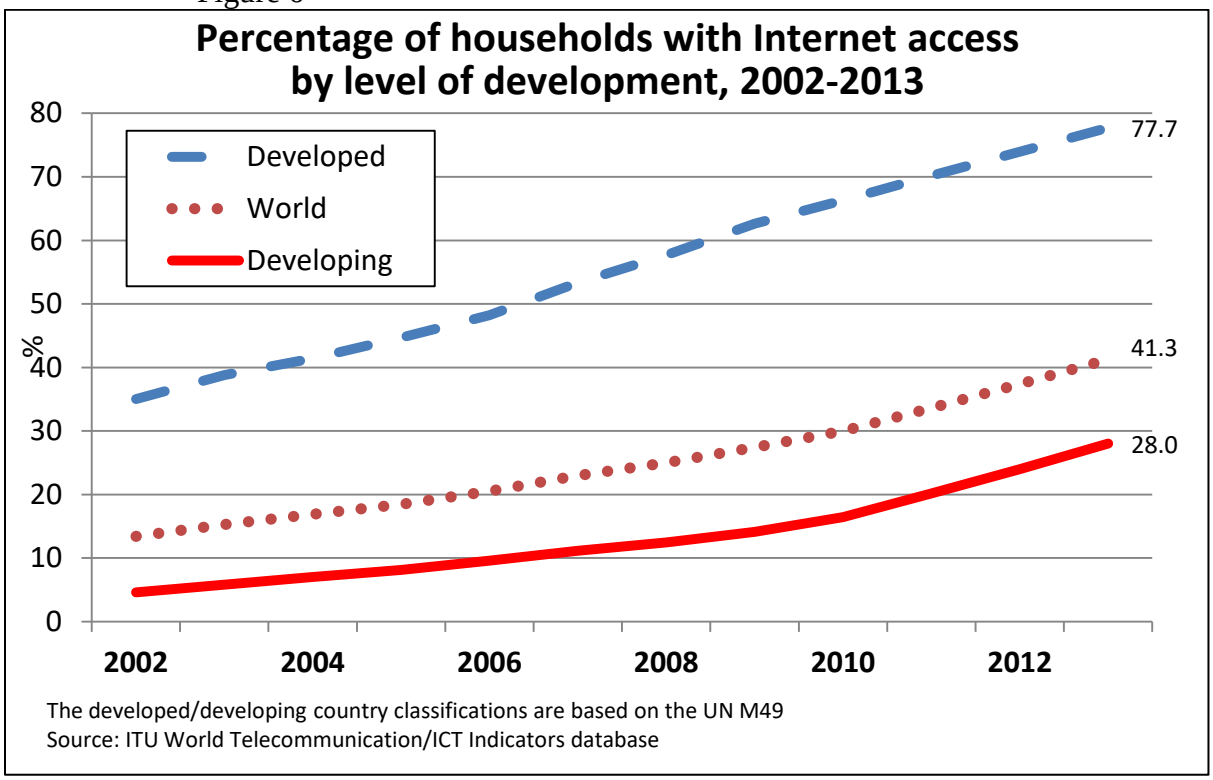

Figure 7

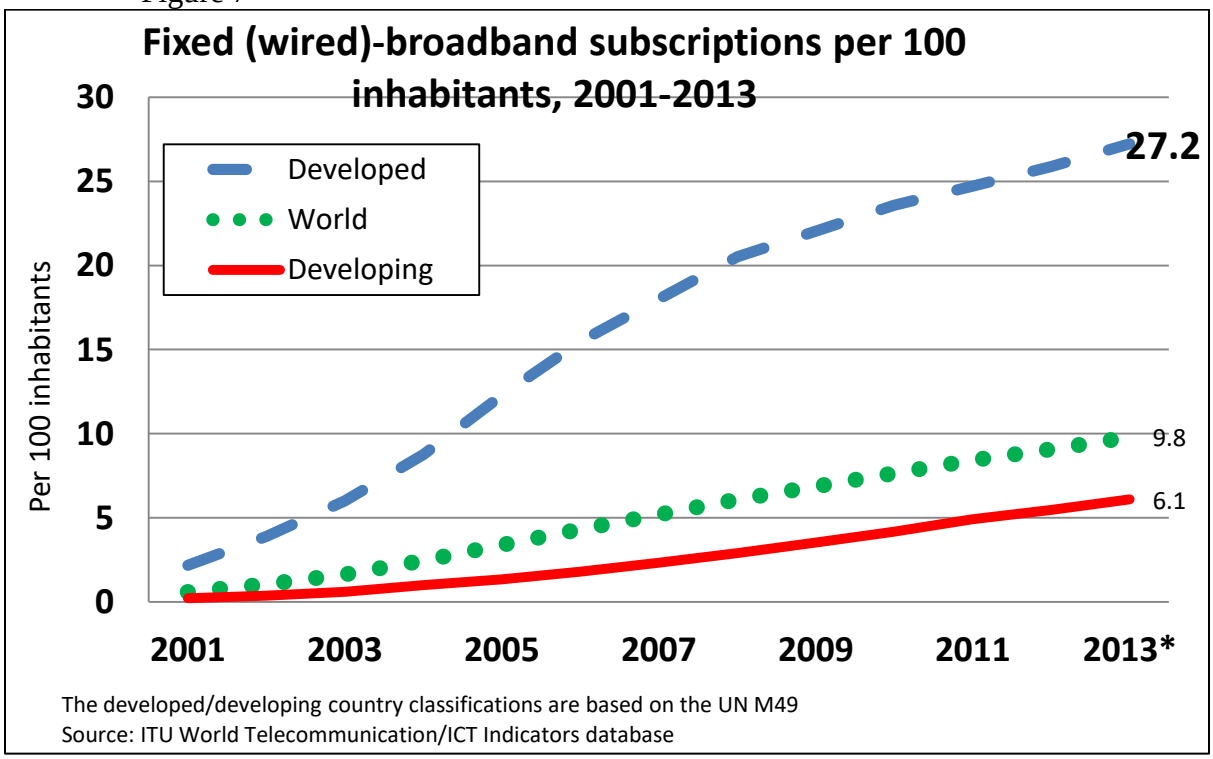

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Figure 8

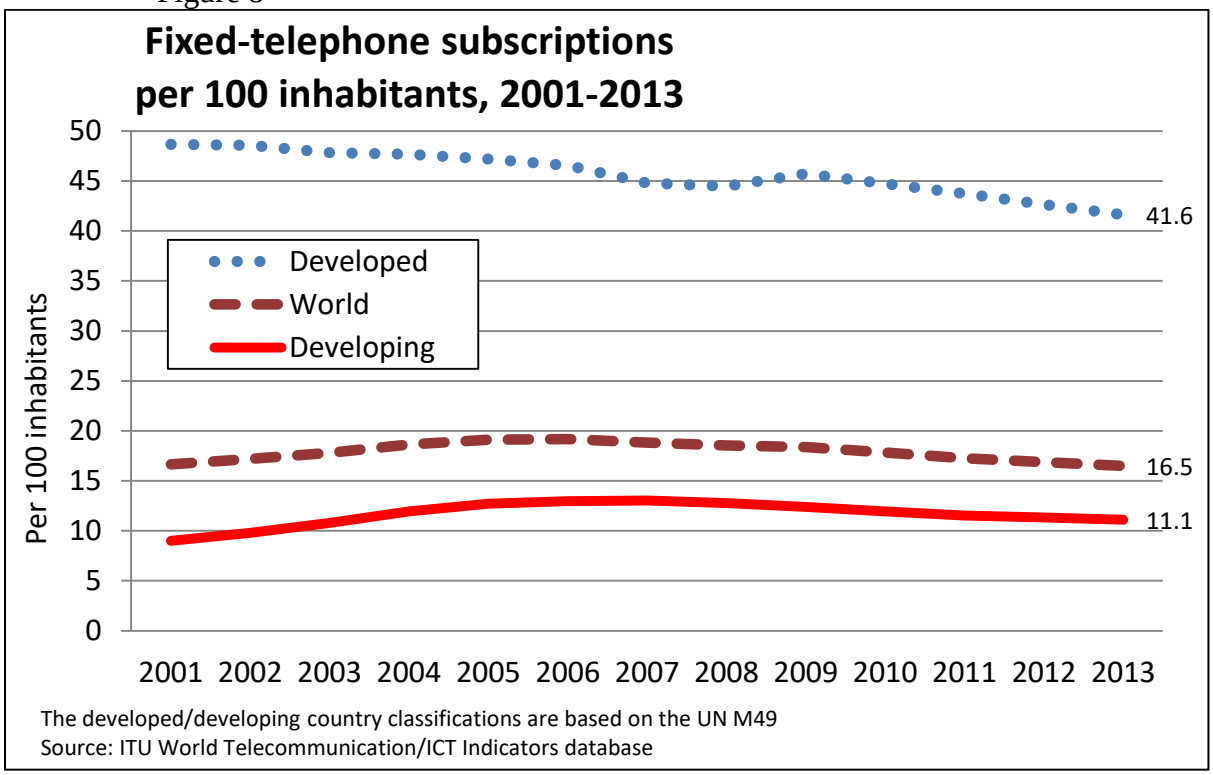

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Table 4: ICT Related Key indicators					
Fixed-telephone subscriptions (per 100 inhabitants)					
	2005	**2007**	**2009**	**2011**	**2013**
Developed	47.2	44.8	45.7	43.7	41.6
Developing	12.7	13.0	12.4	11.5	11.1
Asia & Pacific	15.1	15.3	14.9	13.7	12.9
World	19.1	18.8	18.4	17.3	16.5
Mobile-cellular subscriptions (per 100 inhabitants)					
Developed	82.1	102.0	112.5	119.0	128.2
Developing	22.9	39.1	58.3	78.3	89.4
Asia & Pacific	22.6	37.1	56.3	77.3	88.7
World	33.9	50.6	68.1	85.5	96.2
Fixed (wired)-broadband subscriptions (per 100 inhabitants)					
Developed	12.3	18.0	22.0	24.7	27.2
Developing	1.3	2.3	3.5	4.9	6.1
Asia & Pacific	2.2	3.2	4.7	6.4	7.6
World	3.4	5.2	6.9	8.4	9.8

Households with a computer (per 100 inhabitants)					
	2005	2007	2009	2011	2013
Developed	55.5	62.3	69.1	73.2	75.5
Developing	14.6	17.6	21.4	25.4	27.6
Asia & Pacific	19.8	22.6	26.2	29.0	N/A
World	26.2	30.2	34.6	38.5	40.7
Individuals using the Internet (per 100 inhabitants)					
Developed	50.9	59.0	62.9	70.5	76.8
Developing	7.8	11.9	17.5	24.5	30.7
Asia & Pacific	9.4	13.4	18.9	25.6	31.9
World	15.8	20.6	25.7	32.7	38.8
Source: Table is based on data from International Telecommunication Union (ITU) 2013					

Table 5: Adult (15+) literacy rate (%)						
	2000			2012		
	Female	Male	Total	Female	Male	Total
World	76.9	86.9	81.8	79.7	88.6	84.1
South Asia	45.5	69.8	58.0	50.3	73.2	61.6
East Asia & Pacific	88.0	95.1	91.5	91.6	96.7	94.2
Arab World	55.0	76.2	65.9	64.4	82.2	73.6
Pakistan	30.1	59.3	42.7	42.2	68.8	57.1
India	47.8	73.4	61.0	59.5	79.5	69.7
Bangladesh	40.8	53.9	47.5	52.2	61.3	56.8
China	86.5	95.1	90.9	92.3	97.8	95.7
Iran	70.4	83.5	77.0	82.3	89.3	89.0
Thailand	90.5	94.9	92.6	94.5	96.9	95.7
Source: Table is based on data from UNESCO 2013						

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Table 6: Average revenue per mobile-cellular subscription				
Economy	2007	2008	2009	2010
Canada	56	57	52	61
USA	47	49	47	50
France	48	51	48	43
Israel	35	41	38	42
Kuwait	60	65	45	42
UAE	39	42	38	38
Korea	40	35	30	32

Thailand	8	8	7	7
Russian	9	9	6	7
Philippines	4	4	4	4
Uzbekistan	5	5	4	3
Indonesia	6	4	4	3
Viet Nam	4	4	3	3
Pakistan	3	2	2	2
India†	5	4	3	2
Source: Table is based on data from International Telecommunication Union (ITU) 2013				

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Table 7: Mobile behaviour of People (Percent of total mobile audience Age 13+)			
	USA	**Europe**	**Japan**
Used connected media			
Browser, app or download	46.7	41.1	76.8
Used browser	36.4	28.8	55.4
Used application	34.4	28	53.3
Email	30.5	22.2	57.1
Social networking or blog	24.7	18	19.3
Watched TV and/or video	5.6	5.7	22.8
News and information	39.5	32.2	57.6
Accessed financial services			
Accessed Bank & financial services	11.4	8	7
Financial news or stock quotes	10.2	8	16.5
Source: Table is based on data from ComScore MobiLens (2011)			

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Table 8: Top Ten universities in the world (student enrolment)				
Rank	**Institution**	**Location**	**Founded**	**Enrolment (Million)**
1	Indira Gandhi National Open University	India	1985	3.50
2	Open University of China	China	1979	2.70
3	Anadolu University	Turkey	1958	1.97
4	Islamic Azad University	Iran	1982	1.90
5	Allama Iqbal Open University	Pakistan	1974	1.81
6	Bangladesh National University	Bangladesh	1992	1.00
7	Payame Noor University	Iran	1987	0.82
8	Bangladesh Open University	Bangladesh	1992	0.65
9	Universitas Terbuka	Indonesia	1984	0.65
10	Ramkhamhaeng University	Thailand	1971	0.53
Source: Table is based on data from Wikipedia				

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Table 9: WORLD INTERNET USAGE AND POPULATION STATISTICS				
World Regions	Population (2012)	Penetration (% Population)	Growth 2000-2012	Users %
Africa	1,073	16	3607	7
Asia	3,922	28	842	45
Europe	821	63	393	22
Middle East	224	40	2640	4
North America	348	79	153	11
Latin America / Caribbean	594	43	1311	11
Oceania / Australia	36	68	219	1
WORLD TOTAL	7,018	34	566	100
Source: Table is based on data from International Telecommunication Union (ITU) 2013				

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Table 10: Growth in the Internet Users in Asia							
Asian Continent	Population (Million) 2012	Internet Users,	Internet Users (June 2013)	Growth (2000-2012	Penetration (% of Population)	Users (% of Asia)	Facebook Users (Million)
Afghanistan	30	1,000	1,520,996	1521	5.0	0.1	0.4
Armenia	3	30,000	1,800,000	60	60.6	0.2	0.4
Azerbaijan	9	12,000	4,746,800	396	50.0	0.4	1.0
Bangladesh	161	100,000	8,054,190	81	5.0	0.7	3.4
Bhutan	1	500	150,548	301	21.0	0.0	0.1
Brunei Darussalam	0	30,000	318,900	11	78.0	0.0	0.3
Cambodia	15	6,000	662,840	110	4.4	0.1	0.7
China	1,343	22,500,000	538,000,000	24	40.1	50.0	0.6
Georgia	5	20,000	1,300,000	65	28.4	0.1	0.9
Hong Kong	7	2,283,000	5,329,372	2	74.5	0.5	4.0
India	1,205	5,000,000	137,000,000	27	11.4	11.4	62.7
Indonesia	249	2,000,000	55,000,000	28	22.1	5.1	51.1
Japan	127	47,080,000	101,228,736	2	79.5	9.4	17.2
Kazakhstan	18	70,000	7,884,905	113	45.0	0.7	0.7
Korea, South	49	19,040,000	40,329,660	2	82.5	3.7	10.0
Kyrgystan	5	51,600	2,194,400	43	39.9	0.2	0.1
Laos	7	6,000	592,764	99	9.0	0.1	0.3
Macao *	1	60,000	366,510	6	63.4	0.0	0.2
Malaysia	29	3,700,000	17,723,000	5	60.7	1.6	13.6
Maldives	0	6,000	134,860	22	34.2	0.0	0.1
Mongolia	3	30,000	635,999	21	20.0	0.1	0.5
Nepal	30	50,000	2,690,162	54	9.0	0.2	1.9

Pakistan	190	133,900	29,128,970	218	15.3	2.7	8.0
Philippines	104	2,000,000	33,600,000	17	32.4	3.1	29.9
Singapore	5	1,200,000	4,015,121	3	75.0	0.4	2.9
Sri Lanka	21	121,500	3,222,200	27	15.0	0.3	1.5
Taiwan	23	6,260,000	17,530,000	3	75.4	1.6	13.2
Tajikistan	8	2,000	1,012,220	506	13.0	0.1	0.0
Thailand	67	2,300,000	20,100,000	9	30.0	1.9	17.7
Turkmenistan	5	2,000	252,741	126	5.0	0.0	0.0
Uzbekistan	28	7,500	8,575,042	1143	30.2	0.8	0.2
Vietnam	92	200,000	31,034,900	155	33.9	2.9	10.7
TOTAL ASIA	3,922	114,304,000	1,076,681,059	9	27.5	100	254.3

Source: Table is based on data from International Telecommunication Union (ITU) 2013

Table 11: Mortality rate, under-5 (per 1,000)		
	2000	2012
World	72.7	51.4
South Asia	89.0	62.1
East Asia & Pacific	37.8	19.7
Arab World	61.2	47.2
Pakistan	95.3	72.0
India	87.7	61.3
Bangladesh	84.4	46.0
China	35.0	14.6
Iran	44.0	25.0
Thailand	18.5	12.3
Japan	4.5	3.4

Source: Table is based on data from WHO 2013