Digital-Literacy as the Predictor of Political-Participation a Survey of University Graduates in Dikhan, KP, Pakistan

Zafar Abbas[1] and Dr. Allah Nawaz[2]

[1] Gomal University

Abstract

This study examines the impact of digital literacy on student?s participation in Political Activism?. The computer, internet and cell phone has given rise to the interactive and participatory role of youth in active politics. Survey approach was adopted for data collection. Data was collected through ?Structured-Questionnaire? constructed using the variables extracted from literature. Questionnaire included 6 Demographic and 6 Research variables (4 Predictors and 2 Criterion) expressed through 43 questions. First hypothesis was examined through ?Correlation-Procedure?; 2nd and 3rd hypotheses were answered by using ?Regression-Analysis?. This study will be a role model/ guideline for researchers working in same line of issues. It will provide a local version of the problem thereby helping to design and plan their research projects accordingly.

Index terms— digital-literacy, political-participation, politicalmobility, voting-behaviour.

1 I. Introduction

ormal political process and democracy are depend heavily on effective communication and properly conveyed decisions making regarding political issues between citizens, politicians and other stakeholders as these are the people who can be affected with collective political decisions (Ali, 2010). Democracy guarantees is based on separation of powers, organization of free and fair elections and the respect of human rights and thus it encourages the participation of every citizen in the decisions at all levels. Democracy creates embraces agreements and disagreements and leads towards progress, peace, stability and tranquillity (UNESCO, 2013).

Political participation is moulded by the internet and social media, which provide an opportunity to individuals to come together in new communities of interest & wide, shallow networks, to blog, deliberate and campaign online, beyond physical boundaries . The expansion of electronic and digital media has given people the potential to learn, publish and communicate on an enormous scale **??**ITU, 2008). Digital literacy can provide effective channels of cooperation, dialogue and information exchange among people of tender years. Consequently, the role of young people in the Information Society is very important. Digital literacy enables people to have real time communication, and allows them immediate access to new information **??**INYD, 2011).

Digital technologies offer new means for participation by allowing citizens to use and produce media in an easy and low-cost manner. Some optimistic scholars contend that digital technology promotes political knowledge, interest, discussion and voting (Ostling, 2010). New technologies provide information as well as tools that have the potential to enhance the role of the citizens in the social and political field **??**Khan, Gilani & Miankhel, 2012). Nevertheless, with the emergence of digital technologies, several new prospects emerged for individual and a possibility to achieve its lost participation in the political and economic affairs of the society. The role of internet and other digital technologies is vital in this regard (Khan; **??**iankhel & Nawaz, 2013).

Digital technologies can be a powerful way of youth empowerment. A 19-states social survey of European political participation found that regular Internet users were more likely to be a member of a civic organization **??**Halewood & Kenny, 2007). Research in Europe and the America shows that young people have been less

44   engaged in the electoral processes than other age cohorts in recent years . New technology is profoundly influencing
45   regular political activity in developed industrial societies, by either offering new channels for participation or
46   changing different aspects of existing ones (Anduiza & Cantijoch, 2009). After the Obama campaign in the
47   presidential election of 2008 in United States, it was obvious that social media would play an important role even
48   in traditional party politics of the West. The platforms such as Facebook and Twitter have played important
49   roles in the dramatic events in North Africa and the Middle East during 2011 is also to be underscored (Dahlgren,
50   2011). There are more digital technology users than ever before **??**INYD, 2011).
51   This paper is about the prediction of students' 'Political-Participation' due to their 'Digital-Literacy' by first
52   examining their correlation (H 1) and then applying regression procedures on two separate dimensions of political
53   participation: Political Mobility (H 2) and Voting Behaviour (H 3). Following hypothesis has been tested and
54   discussed: Democracy is a mode of decision making regarding collectively binding rules and policies over which
55   people exercise control, and the most democratic arrangement to be that where all members collectively enjoy
56   equal rights to take part in such decision making directly (Samarasinghe, 1994). Democracy is a universally
57   recognized ideal and goal, which is based on commonly shared values shared all over the world, irrespective of
58   cultural, social, political and economic differences. Thus it is a basic right of citizenship which is exercised under
59   conditions of equality, freedom, transparency and responsibility, with due regard for the plurality of opinions,
60   and in the interest of a polity (UNESCO, 1997). Democracy creates an environment which is suitable for citizen
61   participation and opposition to the elected officials (Altman & Perez-Linan, 2002). Political participation in
62   politics has been modified by the Internet and news media . The emergence of a new medium allows new ways
63   of political participation which never existed before (Anduiza & Cantijoch, 2009).

2   a) Digital-Literacy

65   The demand for universal computer literacy comes from the ways in which digital literacy dominates different
66   aspects of the contemporary life and work (Oliver, 2002). The supporters of social inclusion through digital
67   literacy propose a focus on the electronic literacy as a key to overcoming digital divide (Macleod, 2005). Different
68   groups of people, students, teachers, and employer shave different opinions about the meaning of computer literacy
69   (Johnson;Bartholomew & Miller, 2006). In last 25 years, different models and approaches of computer and digital
70   literacy have started to merge (Ezziane, 2007). Now, digital literacy skills are thought to be essential for effective
71   learning in the present digital environments (Aviram & Eshet-Alkalai, 2006). People attain their technology
72   literacy by two means: formally through school programs or in the workplace, and informally, either at home,
73   from friends, or by themselves (Ezziane, 2007).
74   In today's technological era, basic computer literacy is required in every institution (Ezziane, 2007). Digital
75   literacy is usually though to be a combination of technical procedural, cognitive and emotional social skills. For
76   example, using a computer requires procedural skills (e.g. handling files and editing pictures), cognitive skills (e.g.
77   the ability to automatically read the visual messages embedded in graphic user interfaces). With the growing
78   popularity of digital workplaces and learning environments, digital literacy has become tantamount to a survival
79   skill (Aviram & Eshet-Alkalai, 2006). With changes in technology, the different constituents of computer literacy
80   are liable to change continuously and hence the educators need to constantly revise the course to take in the
81   latest technological developments (Martin & Dunsworth, 2007;Kundi & Nawaz, 2010).

3   b) Political Role of ICTs

83   Political participation has focussed on the impact of technology, especially the Internet, on the political activity
84   of general public. The Internet has significantly altered the cost structure of participation, and has also enhanced
85   the range of possible political activities. It has extended the opportunities for mobilising conventional political
86   associations, while giving fame to the use of certain extra representative styles of participation, such as direct
87   action politics and new social activities. New technology has facilitated the extension of the aims of participation,
88   broadening their scope and enabling coordination and political power on a transnational scale to occur with an
89   ease which was almost unknown until a decade ago (Anduiza & Cantijoch, 2009).
90   Young people are in many ways the defining users of the new media. All generations accept devices and
91   Internet technologies, but young people consumers are Net natives. They do not just go online; they live online
92   (Montgomery, 2008). The rise of new media, particularly the Internet, has given ascent to a new wave of hopes
93   and fears. Some philosophers warn that the use of Internet can displace face to face sociability, while the other
94   researchers celebrate new means of connecting with others. The appearance of mobile communication technology
95   warrants another pace with research and theory on the intersections among new media and civic engagement.
96   Mobile subscriptions are into the billions, making it among the fastest developing communication technology ever.
97   Yet, researchers are only starting to understand the position of the technology in civic participation (Campbell &
98   Kwak, 2010). i. Political-Participation Democracy is the system of government run by the people, for the people.
99   Democracy assures the separation of power and organization of free and fair elections, based on the respect of
100 human rights and foster the participation of every citizen in decisions at all levels. Democracy makes room for
101 agreements and disagreements and gives an environment of progress, peace, stability and tranquillity. Democracy
102 is a system of consultation, dialogue, and consideration of stakeholders regardless. The engagement of young
103 citizen in participatory structure, the dialogue between public authorities and young citizens and structures or

Individual participation in the democratic process and public life at levels must be regulated fairly, impartially and must avoid any discrimination, and the risk of pressure by State and non-State actors (UNESCO, 1997). Democracy generates the potential for citizen participation and opposition to elected officials (Altman & Perez, 2002). Democracy, assumes a genuine partnership among men and women, free political competition, and open, free and non-discriminatory participation by the people, exercised as per rule of law (Gill, 2006).

The development of electronic and digital infrastructure has given millions of the people the potential to learn, publish and communicate on an unprecedented scale. The rapidly declining the real cost of requisite information and communication technologies [ICTs], combined with huge changes to the available infrastructure, have allowed young people to take benefits of technology to do and achieve things unfamiliar to earlier generations (ITU, 2008). Political participation is a fluid concept and the ideas encompass a diverse set of activities. It can be defined as citizen acts in order to influence the selection of and/or the actions taken by the political representatives. In other words, political participation can be understood as referring to the different mechanisms through which public express their political views and so use their influence on the political processes (Chatora, 2012). A normative conception of young people participation, defining political participation broadly is about engaging in generating opinions and taking actions in order to bring about positive change in the society (LSE, 2013).

Participation in the civic life is fundamental human right. Young citizens have the critical role to play in social change. Civic engagement refers to the means in which citizens participate in the life of a community to improve conditions for others or/ and to help shape the community's future. Despite the fact that there are many existing definitions of civic engagement with no single, widely agreed upon meaning for the term, civic engagement is usually viewed as focusing on participation in on-going change by advancing economic, ecologic, social and the political conditions. Young citizens may contribute by informing, reforming, and constructing a society that will contribute to their wellbeing and promotion of equity and inclusiveness. Young people civic engagement is also increasingly accepted as a vital component of youth development because it can help build human as well as social capital and educate people regarding their political and the civic rights, as well as their responsibilities as citizens (UNESCO, 2013).

4   ii. Voting Behaviour

The main element in exercise of democracy is the contesting of free and fair elections at regular intervals in order to enable the people's will to be expressed. These elections must be held on the basis rules of universal, equal and secret suffrage so that all the voters can elect their representatives on the conditions of equality, openness and transparency that stimulate political competition. For the purpose, civil and political rights are vital, and more essential among them, rights to vote and to be elected, rights to freedom of expression and assembly, access to information and the right to organize political party and to carry out political activities (UNESCO, 1997). People are addressing their claims to the public authority and legislative body, and also having control on political decision making in elections by electing a candidate whose political manifesto seems to match best their personal preferences (Hayhtio, 2006).

A state of democracy guarantees that the process by which power is acceded to, exercised and alternates allow for political competition and is the product of open, free and non-discriminatory participation by the people, exercised as per rule of law, in letter and spirit (UNESCO, 1997). The most obvious way in which people participate in the political decision making is when they cast vote for their government representative. Digital literacy could make the voting processes more suitable by enabling electronic voting, either from a voting station of voter's choosing or by the Internet from anywhere. This will also speed up vote counting (Oates, 2003).

Digital software and technology were a central part of numerous efforts to promote youth voting during the 2004 presidential election in USA. While Internet had already been begun to play an increasingly significant role in campaign politics, 2004 marked the first real high-tech election. Scholars at George Washington University recognized a new class of Internet users, which they labelled as "Online Political Citizens." Though not exclusively young people, this group of Internetsavvy political participants included a noteworthy number of youth, with 36 % of them between the ages of 18 and 34, as compared to 24 % of the general public. A large majority of them (44 %) had not been politically engaged before and had never "worked for a campaign, made a campaign donations or attended a campaign event. "They visit campaign Web sites, donate money online, join Internet discussion groups, and read and post comments on Web logs." They also "organize local events through Web sites such as meetup.com or donate money to their causes on sites such as moveon.org or grassfire.org." They "use campaign Web sites as hubs" and "depend heavily on email to stay in touch with the campaigns, receive news stories and muster support" (Montgomery, 2008).

5   III. Research Design

A close scrutiny of the social research methodologies shows that survey is the best way for collecting primary data through questionnaire and interviews of people about their thinking and attitudes. It is the most commonly used mode of observation in the social sciences **??**Babbie, 1993:257). The potential of survey research is that it allows the researcher to gather data in order to answer every question about the relevant topic **??**Yin, 1994:6). In case of human and social topics, the researchers have always thought that surveys are reportedly excellent means for measuring attitude in large population **??**Sekaran, 1999: 257). A survey is a consistent approach of

collecting data. Survey research is greatly helpful in documenting existing community conditions, features of a population, and community thinking. Both qualitative and quantitative data are included in the research.

Thus, survey approach is used in the current study by implementing a structured questionnaire distributed among 180 students of Public and Private Universities of D.I.Khan (KPK) with 67% return rate (121). The instrument consisted of six demographic and six variables (i.e., Dependent & independent variable). 7 point scale is used where 1 represent a strongly disagreement and 7 for strongly agree with the statement. SPSS 16 helped in creating the data base and statistical analysis. It is also pertinent to mention here that all the students of these universities form our target population of this study.

The researcher used the formula for selecting the sample size from a finite population: $[(SD\ 2\ )/(E\ 2\ /z\ 2\ )+ (SD\ 2\ /N))]$ (Weirs, 1984).

6 IV. Findings of the Study

7 Analysis

The Hypothesis # 1 is about the association (relationship) of Independent variables (predictors) with dependent variables (criterion). The above table **??** Given these results, Hypothesis # 3 is partially accepted as true because 22% of variation in Voting Behaviour is attributed to the predictors.

8 V. Discussions

In the current study the relationships between the contemporary boom of information and communication technologies (ICTs) and political participation of the University Graduates were explored through analysing the first-hand data collected through a survey-instrument extracted from the existing literature.

The descriptive statistics is evident that respondents have shown moderate agreement with the impact of digital literacy on student's participation in politics, on all the variables i.e. After thoroughly reviewing the exiting literature and minutely examine the primary data acquire from field survey through questionnaire, the comparison of both is evident that there is a significant relationship among several variables, while there is also some differences. Digital literacy has profound influence on networks of societies (comprising of individuals) and also different organizations irrespective of geographical locations.

It will be pertinent to state that as existing literature shows that the involvement of students (youth) has been enhanced due to the use of digital technologies in the political process, in a same manner our field survey also indicates the same results, it means that digital technology accelerates the participation of youth in political process of Pakistan. The coverage of electronic and print media is an ample proof in this connection that the turnover was about 60% in the recent general elections, which was the highest turnout ever before in **??**akistan. Literature indicates that internet has directly affected not only the cost but also the participation of youth on political process in positive direction. In this context the example of Egypt social awareness through social media in the year 2011 cannot be ignored in any analytical study of the globe. "We all are the Khaled" was in fact a driving sentence on a social media (Facebook) in the political scenario of Middle East, which was the direct outcome of Internet and social media.

Participation, competition and liberty are basic elements of democracy, but due to lack of information dissemination, the participation of general masses and particularly youth was below standard, but with the inception of digital technologies the issue of information dissemination has been solved to some extent and now the participation of general population in electoral process has been increased while in particular it is said that digital literacy are their phenomena. As a result the participation of students (youth) in political process can be observed not only in whole world but also in Pakistan.

Both the literature and our survey indicates that due to digital literacy the connections and connectivity between the international community has been increased and now each and every individual has become the part of the discussion about world politics. It enhanced the capacity building of voters to decide about the use of casting their votes which ultimately set a trend of particular voting behaviour among youth.

9 VI. Conclusions

? Digital literacy and all its gadgets (internet, mobile etc.) are closely connected (statistically significant -H 1) with the political participation, political activism and voting behavior of the University graduates as verified in the current study of students from Gomal and Qurtuba Universities of Dera Ismail Khan. [1]

Figure 1: 1 :

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4.2) gives statistics on the results of correlation analysis.

The correlation between Digital Literacy and

Criterion variable (Political Membership & Mobility) is: r

= 0.17 with p value = 0.052

1. The correlation between Internet and dependent variable (Political Membership & Mobility) is: r = 0.33 with p value = 0.000

2. The correlation between Mobile and (Political Membership & Mobility) dependent variable is: r = 0.45 with p value = 0.000

3. The correlation between Pol. Role of ICTs and Criterion variable (Political Membership & Mobility) is r = 0.33 with p value = 0.000

Similarly other sub variable of Political Participation also gives high levels of relationship with independent variables, such as:

i. Voting behaviour with Digital Literacy	r = 0.41 with P-value 0.000
ii. Voting behaviour with Internet	r = 0.40 with P-value 0.000
iii. Voting behaviour with Mobile	r = 0.20 with P-value 0.026
iv.	

Figure 2: Table #

4

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
1	.455 a	.207	.200	.77889	30.998	.000 a
2	.488 b	.238	.225	.76645	18.452	.000 b
3	.514 c	.264	.245	.75669	13.976	.000 c

Table 4.3a : Coefficients of Regression

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant) Mobile	2.851 .456	.405 .082	.455	7.044 5.568	.000 .000
	(Constant)	1.863	.598		3.113	.002
2	Mobile	.387	.086	.385	4.471	.000
	Internet	.240	.108	.191	2.212	.029
	(Constant)	1.454	.625		2.328	.022
3	Mobile Internet	.416 .235	.087 .107	.415 .187	4.806 2.193	.000 .030
	Income	7.601E-6	.000	.162	2.016	.046

Table 4.3b : Excluded Variables

Model		Beta In	T	Sig.	Partial Correlation	Collinearity Statistics Tolerance
	Digital Literacy	.025 a	.285	.776	.026	.884
	Internet	.191 a	2.212	.029	.200	.869
1	Pol. Role of ICTs	.152 a	1.662	.099	.151	.785
	Income	.167 a	2.035	.044	.184	.970
	Age	-.063 a	-.767	.445	-.070	1.000
	Digital Literacy	-.069 b	-.724	.470	-.067	.722
2	Pol. Role of ICTs Income	.120 b .162 b	1.308 2.016	.193 .046	.120 .183	.761 .969
	Age	-.047 b	-.579	.564	-.053	.992
	Digital Literacy	-.156 c	-1.569	.119	-.144	.630
3	Pol. Role of ICTs	.087 c	.942	.348	.087	.731
	Age	-.054 c	-.670	.504	-.062	.990

Figure 3: Table 4 .

Figure 4:

9 VI. CONCLUSIONS

213 [Halewood] , N Halewood .

214 [Khan] , M Khan .

215 [European Journal of ePractice] , *European Journal of ePractice*

216 [Johnson et al. ()] , D W Johnson , K W Bartholomew , D Miller . 2006. (Improving computer literacy of
217   business)

218 [Martin and Dunsworth ()] 'A methodical formative evaluation of computer literacy course: What and how to
219   teach'. F Martin , Q Dunsworth . *Journal of Information Technology Education* 2007. 6.

220 [Altman and Perez-Linan ()] 'Assessing the Quality of Democracy: Freedom, Competitiveness and Participation
221   in Eighteen'. D Altman , Perez-Linan . *Latin American Countries. Democratization* 2002. 2002. 9 (2) p. .

222 [Babbie ()] E Babbie . *The practice of Social Research. 7 th*, 1993. Wordsworth Publishing Company.

223 [Samarasinghe ()] 'Democracy and democratization in developing countries. Data for decision making project,
224   Department of Population and International Health'. S W Samarasinghe . *Harvard School of Public Health*
225   1994.

226 [Pakistan] *Department of Film*, Pakistan . New Zealand. Television and Media Studies University of Auckland

227 [Digital-Literacy as the Predictor of Political-Participation a Survey of University Graduates in Dikhan]
228   *Digital-Literacy as the Predictor of Political-Participation a Survey of University Graduates in Dikhan*, KP,
229   Pakistan.

230 [Chatora ()] *Encouraging Political Participation in Africa. Institute for Security Studies*, Chatora . 2012.

231 [Gill ()] *Free and Fair Elections. Inter-Parliamentary Union Geneva*, G S Gill . 2006.

232 [Hayhtio ()] *ICT and political participation: two discourses of political citizenship*, T Hayhtio . 2006. Department
233   of Political Science and International Relations University of Tampere

234 [Ostling ()] *ICT in politics: from peaks of inflated expectations to voids of disillusionment*, A Ostling . 2010.

235 [Khan and Nawaz ()] *Information & Communication Technology and 'Individual': Prospects & Concerns. Global*
236   *Journal of Computer Science and Technology Volume XIII Issue VII Version I*, M Z Khan , D Nawaz . 2013.

237 [Gilani and Miankhel (2012)] 'Information technology led globalization and transformation of polity from local
238   to global'. S Gilani , A Miankhel . *Political Science and International Relations* 2315- 506X. 2012. November,
239   2012. 1 (8) p. . (Global Advanced Research Journal of History)

240 [Ezziane ()] 'Information technology literacy: Implications on teaching and learning'. Z Ezziane . *Educational*
241   *Technology & Society* 2007. 10 (3) p. .

242 [International Year of Youth ()] *International Year of Youth*, http://social.un.org/youthyear/docs/
243   IYY_Fact_Sheet_ICT_Final.pdf 2011. August 2010-2011. November 06. 2013. (Our Year Our Voice)

244 [management majors: A Case Study Journal of Information Technology Education] 'management majors: A
245   Case Study'. *Journal of Information Technology Education* 5.

246 [Campbell and Kwak ()] 'Mobile Communication and Civic Life: Linking Patterns of Use to Civic and Political
247   Engagement'. S W Campbell , N Kwak . *Journal of Communication* 2010. 2010. 2010. 60 p. . (International
248   Communication Association)

249 [Anduiza and Cantijoch ()] *Political participation and the internet: a field essay. Information*, E & Anduiza , M
250   Cantijoch . 2009. 2009. Communication and Society. 12 p. .

251 [Nawaz and Kundi ()] 'Predictor of elearning development and use practices in higher education institutions
252   (HEIs) of NWFP, Pakistan'. A Nawaz , G M Kundi . http://www.academicjournals.org/JSTER
253   *Journal of Science and Technology Education Research (JSTER)* 2010. 1 (3) p. .

254 [Sekaran ()] *Research Methods for Business: A skill building approach*, U Sekaran . 1999. John Wiley & Sons.
255   (3rd ed)

256 [Ali ()] *Role of ICTs in Creating Awareness about Rights A Step Towards True Democracy in*, Z S Ali . 2010.

257 [Collin ()] 'The internet, youth participation policies, and the development of young people's political identities
258   in Australia. Routledge'. P Collin . 10.1080/136762. *Journal of Youth Studies* 2008. 11 (5) p. .

259 [Oates (2003)] *The potential contribution of ICTs to the political process*, B Oates . 2003. 01/2003. 1 p. .

260 [Oliver ()] *The role of ICT in higher education for the 21st century: ICT as a change agent for education*, R
261   Oliver . http://elrond.scam.ecu.edu.au/oliver/2002/he21.pdf 2002.

262 [Aviram and Eshet-Alkalai ()] 'Towards a Theory of Digital Literacy: Three Scenarios for the Next Steps'. A
263   Aviram , Y Eshet-Alkalai . *European Journal of Open* 2006. (Distance and E-Learning)

264 [IT (2008)] *Use of Information and Communication Technology by the world's children and youth*, IT .
265   http://www.itu.int/ITU-D/ict/material/Youth_2008.pdf 2008. November 06. 2013. (Retrieved
266   on)

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267   [Macleod ()] 'What role can educational multimedia play in narrowing the digital divide'. H Macleod .
268   *International Journal of Education and Development using ICT* 2005. 1 (4) .

269   [Dahlgren ()] 'Young citizens and political participation online media and civic cultures'. P Dahlgren . *Taiwan*
270   *Journal of Democracy* 2011. 7 (2) p. .

271   [Kenny ()] *Young People and ICTs in Developing Countries. The World Bank*, C Kenny . 2007. Washington DC.
272   (ckenny@worldbank.org)

273   [Collin ()] *Young People Imagining a New Democracy: Literature Review*, P Collin . 2008. University of Western
274   Sydney

275   [Montgomery ()] *Youth and Digital Democracy: Intersections of Practice, Policy, and the Marketplace*, K C
276   Montgomery . 2008. 2008. Cambridge, MA: The MIT Press. p. .

277   [Lse ()] *Youth Participation in Democratic Life. LSE Enterprise Limited Eighth Floor*, Lse . 2013. Tower Three
278   Houghton Street London.