Youth dependency on communication and information technology in developing countries: an analysis

Fauzia Khurshid[1], Hassan Nasir[2], Payam Amin[2], Inam Khan[2], Haroon Khan Afridi[2] and Zara Iqbal[2]

[1]NUML, Pakistan.
[2]NUST, NBS.

ABSTRACT

This paper attempts to look at how information and communication technology continually influence the people, their lives and practices in general in developing countries, and examine whether it is for better or for worse. Dependency of low-income groups on information technology is not a mere phenomenon, but a solid hard-ground fact, and has a number of benefits as well as costs. However, at the end it is suggested that in addition to ICT being more advantageous than disadvantageous for third world countries, more effort needs to be put in educating the users of such technology, so that the costs associated with their use can be minimized, and the benefits maximized.

Introduction

In today's age and time, information technology is playing a continuous and ever increasing role in the lives of people over the globe. Globalization has in fact colored the lives of many people, and like all other instances of research or innovation, it entails both positive and negative results. Our research starts with a brief discussion of what sort of costs and benefits ICT brings to people; both on the individual level, and for the developing state/ country on a whole as a global actor, in the form of a literature review. After this we attempt to analyze the current beliefs people in our sample developing country - Pakistan- hold on different means of communication and info-tech, through a randomly-sampled survey. Once we have established that there are both costs and benefits to using information and communication technology, and that the youth is in fact dependent on them, we conclude with an analysis of tackling the actual issue at hand: What should be done to derive the maximum benefits out of ICT usage, and how costs and the harm brought about by using mobile phones (for example) to low income nations can be curbed, or at least minimized.

Whether we like to admit it or not, for those of us living in the developing countries of the world incorporating more and more technology into our lives has become an ever-increasing trend in the recent years. However, when it comes to deciding if this is good for us or not, we have to look at all aspects. So to start, we'll begin by defining what Information and Communication Technology really are.

According to an online sourced dictionary, Information and communication technology is basically the term use to describe that technology which is used to access information or to interact with other people. For an individual, according to a number of studies found on the internet (Oska 2008) we find that among others, with the efficient use of technology the following benefits are entailed for an individual:

- Make life easier
- Minimize mistakes in performing tasks
- Save time
- Efficiency and productivity (i.e. increase precision)

In the article **Uses and Advantages of Modern Technology in Physical Education (Dr. S. H. Bhat)** the increasing role of information technology in the educational field, with an emphasis on Pakistan (a developing country) is highlighted. Dr Bhat starts off by mentioning the various advantages of incorporating info-tech oriented methods into school level education. In addition to making learning an easier and a lot more interactive, he talks about how the quality of student work is improved along with student creativity and problem solving skills. When it comes to physical education, therefore, Dr. Bhat indicates the need for technology backed methods of play. He especially focuses on competition intelligent equipment, modern electronic media equipment in gymnastics and umpire assisting (via communication tech). He concludes by reflecting on how advancements in technology have made teaching an enjoyable experience.

According to a program launched by the World Bank, Information and communication technology can also be integrated into the workings of many developing countries via numerous methods to "stimulate sustainable economic growth, improve service delivery, and promote good governance and social accountability" (World Bank, 2012).

Information and Communication technology, when used properly, can also help reduce the corruption most of our developing countries face, according to a study by Rumel Mahmood (Can Information and Communication Technology Help Reduce Corruption? How So and Why Not: Two Case Studies from South Asia). Mahmood cites the example of India to show how a country can work to prevent and control corruption when the government introduces a number of ICT-oriented reforms. These reforms work to improve state-citizen interactions and thus introduce transparency into the electronic system of governance. This in turn leads to a healthier state and thus a happier nation well on its way to development. As Mahmood also points out, the majority of nation-states that

already use such systems are located in the industrialized West, which further proves how vital it is for a nation that wants to progress to embrace and incorporate correct Information/ technology measures into its existing political systems. All these benefits cite above show us that yes; there are great benefits to using info-tech, for the individual and for the community.

An extensive report on **the Harm and Benefits of modern technology (Oska 2008)** lists a number of direct and indirect disadvantages of using information and communication technology. These include:

- An inability to stay connected to family and friends at large
- A sense of slavery or dependency on technology
- A loss of personal identity/history
- An exaggerated sense of one's own importance
- Worsened organizational skills
- Impaired hearing
- Loss of sense of direction (without technological internet/satellite backed tools)
- Phone/internet addiction (Oska 2008)

A similar study carried out on users of **Smartphones (Pew Research Centre)** indicated the following results

- Detachment of children from the true essence of social interaction
- Weakening of children's eye sight
- Affect brain development
- Detrimental effect on children's development (due to lack of exercise etc)

These results are depicted in the pie charts below in terms of actual percentages (as depicted by the results of the actual study by Pew Research Centre).
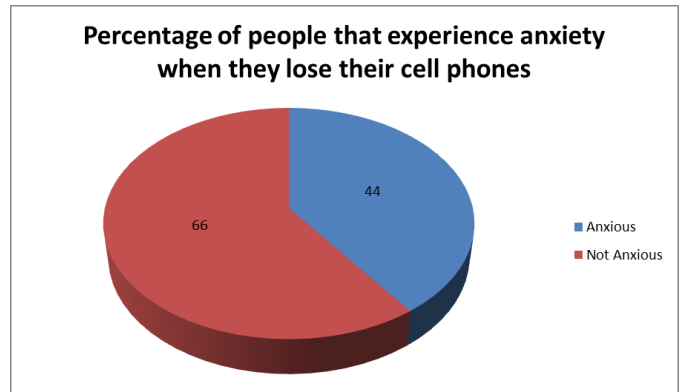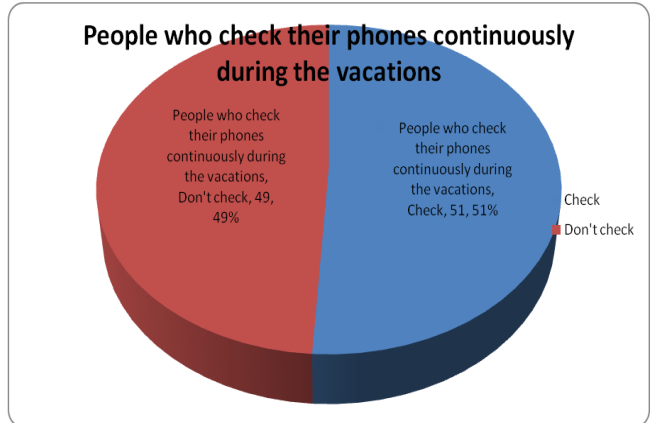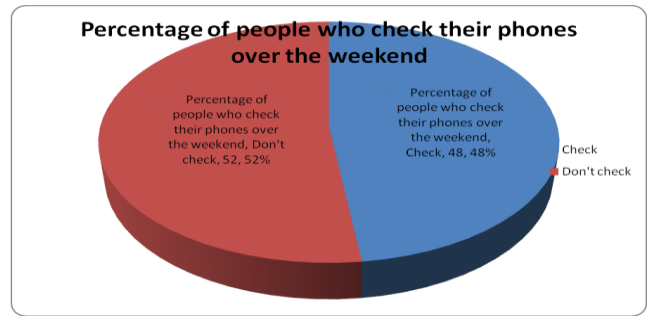
(Pew Research Centre)

From the studies cited above we can see that there are countless costs and benefits associated with using information technology. To see which of them outweighs the other is quite an impossible task but in light of the plight of several developing countries (Mahmood et al), we can conclude our literature review by saying that the benefits for a community outweigh the costs.
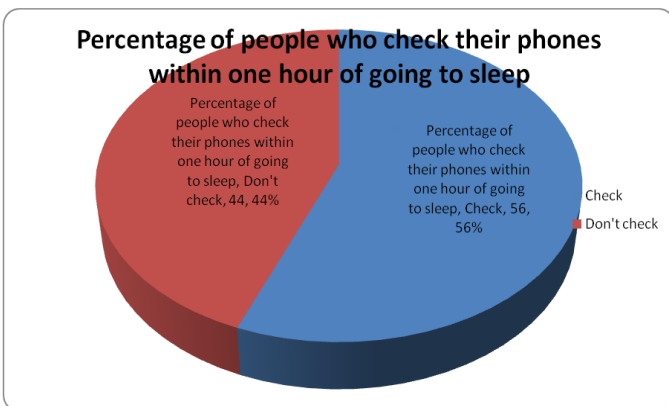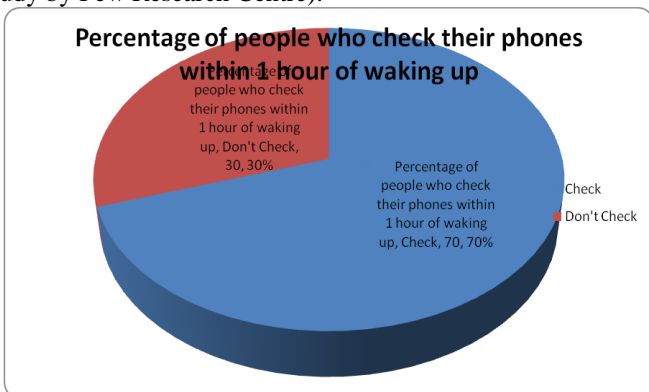
Methodology

Sample

A **Random Sample** of 65 University students was approached from all over Pakistan. These students were part of institutions such as NUST, LSE, LUMS and IBA. When conducting the survey we made no bias over the gender of the respondent. Our age bracket was between the ages of 18-24 and it was anonymous-so we didn't entirely know who was answering the survey. We did not assign any sort of quota as to how many of each university were to reply.

Tools/Instruments

The tools here were thus the survey that was carried out over the internet through **Google Docs**. We also carried out a written questionnaire to approach NUST students. This ensured that our survey was truly random and the software used, i.e. Google Docs, helped with creating all the statistical analysis.

Methods

This survey had a total of 9 questions that were designed in a way such as to check the dependency of the upcoming youth on technology. We focused on those components of info/communication tech that we knew most of the youth were familiar with such as Cell Phones, Internet, the, Television, Gaming Consoles and Social Networks.

Below is a snap shot of the online Google Docs questionnaire that was answered by the approached respondents.

Results

The results of the survey were very much as we expected them to be. To emphasize the importance of some of the answers, we have presented the results Question-Answer wise, so that nothing is lost in the process of compiling the results.

Question 1

For the first question we asked our respondents how long they spent watching TV every day. The actual question and the results (in the form of a pie chart) are

From this we saw that not only did all our respondents watch TV every day, but over fifty percent of them watched more than three hours of TV daily.

Question 2

The second question, like the first, is depicted below

This question was aimed at finding out the dependency of the youth on their cell phones. The answers to this question were pretty well divided up, as the pie chart above shows. Alarmingly, however, it was noted that about 47 % of the sample population sent more than 50 messages per day which is a huge proportion. This supported our hypothesis that the youth extensively uses their cell phones daily.

Question 3

This question asked the respondents which piece of technology, apart from their phones, they could not live without. Because we did not give any multiple choices this time and left a blank for the respondents to fill in by themselves, we got to see what other types of technology (besides cell phones) the youth used frequently.

The results showed that 77% of the sample population at very attached with their laptops. 12 % of the population felt that they couldn't survive without their cars. 8% of the population said that they used their iPod daily.

Only 3 % of the entire population felt that they were fine without any other gadget as long as they had their cell phones with them.

Question 4

The next question asked the respondents how long they spent on social networking websites on a day to day basis. It was assumed that as most of the sample answered the question online, they were regular users of the internet and such websites.

How many hours do you spend on Facebook/Youtube/Twitter daily? *

○ Less than 7

○ 7

○ 8

○ More than 8
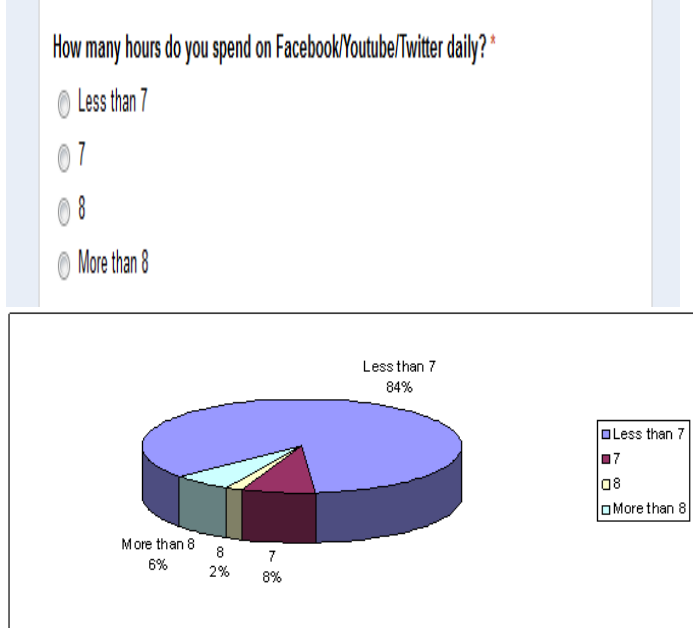
Internet usage has increased a lot since the introduction of social networking and video streaming sites such as Twitter, Facebook and YouTube. The question was structured in such a way so as to see the percentage of outliers in our study. Even though we had 84% of our respondents reply that they use social networks and video streaming sites for less than 7 hours, we still had a total of 16% of the remaining respondents say that they use these sites for more than the normal limit.

Question 5

This open ended question was intended to capture the emotions and reactions of the youth when social networking and video streaming sites were put offline.

How did you feel when YouTube/Facebook went offline? *

The answers that we received were skewed towards the respondents either being unhappy or extremely mad and frustrated. Below are a few examples of what the respondents had to say.

● Blocking Facebook is not much of a thing since there are other social networking sites too like Twitter etc. However, YouTube for most people like me is a source of easy learning. Tutorials and other stuff was the best way to easily get your problems solved."

● "Blocking YouTube for this long is not a good idea." "Angry. Very angry. Frustrated. Very frustrated. " "Didn't feel good. I thought it was stupidity" "I felt as if my life ended."

Question 6

Question Six asked people if they played video games.

Do you play video games? *
This includes cell phone games as well.

○ Yes

○ No

This was a prefix yes or no question made so as to check the proportion of the respondents that played video games. A vast majority of them said that they did (86%) play video games regularly. This question was actually intended to be a backup for the next question that we were to ask. The basic concept behind this was also to capture the market of the video game industry and see how they have thrived over the years into being able to take a niche market and make it into the powerhouse it is today. This has shown that technology has truly changed over the years.

Question 7

The next question: "Do you think video games are harmful to the youth of the world? If yes then how?" was merely an extension of question seven.

Do you think video games are harmful to the youth of the world. If yes then how? *

This question was again an open ended question. Most of the respondents had a view that video games were not at all harmful to the youth. These are some of the answers that the respondents left.

● Yes, the youth has stopped playing physical sports and they tend to remain inside the house.

● Yes, it can be with proper guidelines and restrictions set by parents. Though playing games is also an amazing way to build upon ones general knowledge and also enhances ones reflexes and reaction time.

● No, they are not. But then again excess of everything is harmful.

● They are extremely harmful. First because excessive gaming weakens the eyesight. Secondly it's a waste of time. Thirdly kids stop paying different sports like football or cricket which is necessary for the youth.

Question 8

The eighth question was a multiple choice question aimed at finding out the views of the sample population regarding technology and its disadvantages.

Do you think technology is harming the youth? *

◉ Yes

◉ No
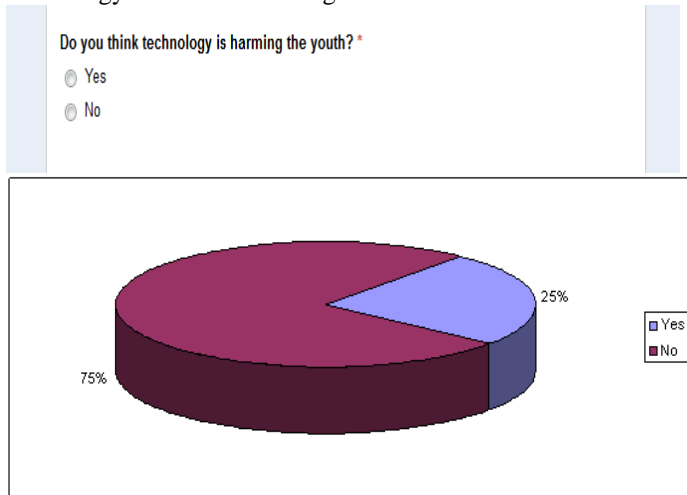
The results showed that 75% of the population opposed the idea that technology was harmful to the youth. Although the respondents to our survey did not feel that technology was influencing their lives much, the results state otherwise. It's ironic that the majority of the respondents did not feel that they were getting more and more attached to technology but refused to accept it.

They might not feel that technology harms us because of the lack of knowledge regarding this topic.

Question 9

Question nine was related to the previous question, but here we asked for an explanation as to why people believed technology might be harming them.

If yes, please comment on how it is harmful.

Some of the answers were as follows;

"Yes because we do provide the youth with technology but we do not instill in them the necessary ethics that need to be kept in mind."

"It's a means of propaganda."

"Leads to them spending less time with parents."

"Makes people lazy."

Analysis of the results

The results from the survey were thus important for two major reasons. Firstly, that they agreed with our initial hypothesis and showed that a larger proportion of the youth IS in fact getting more dependent upon technology and secondly that this dependence cannot be ignored, despite people's already

perception of the harms associated with using info and communication based technology

A lot of the people who took part in our research realized that the info and communication technology they were using did have many harms to it (See questions 8 and 9), but even then their responses indicated that they were not willing to give up their gadgets (question five).

Discussion and Implications

Keeping the results of both our literature review and survey in mind, we come to the conclusion that first of all technology has its benefits and costs. But we cannot avoid the costs of technology by stopping the youth from using it, because the youth of today, even in a developing country like ours has become so dependent on it that it would be to our harm to eradicate it. Secondly, for a developing country there are many benefits that can be derived from using info-tech, as cited in the literature above. Thus we end by saying that instead of working toward eliminating technology usage, we should instead educate our youth on using technology efficiently so that

1)Its harm can be minimized, while the benefits maximized

2)That a developing country like ours can work to improve the living standards of its people and develop such systems that integrate technology and progress into its working.

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