



Students' Digital Literacy: Role and Possible Impacts

(A case study of female student 14 - 18 years old)

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Abstract: Teenagers, who benefit from digital literacy, have higher ability to understand and decode most of the complex messages which are received from the media. They investigate and even look for the way of formation of the message, its meaning and the concept behind it. Such this factor has led to a higher level of participation of this group in such a way that they are less impressed by the side effects causing by social networks. In recent years, an attempt has been made to identify opportunities and threats entailed by the digital world associated with different age categories. In addition, several studies have been conducted to illustrate the importance of improving digital and media literacy and its effect on teenagers in the age group 14-18. Compared to the other age categories, this category carries the highest number of social network members with a high degree of vulnerability. Therefore, the study has been performed on the female students from this age category. The results reveal that about 63.4% of female students of the age from 14 to 18, agree on the significant role that the internet plays in their educational progress.

Keywords: Digital Literacy, Media Literacy, Digital Media, Computer Addicted, Education, Training.

1. Introduction

Digital literacy is the ability of understanding, applying, and generating contents in the digital world by a series of computer resources. As the internet has deviated from its scholastic form and has transformed to a global publication, having a digital literacy is very

essential. Digital literacy is one of these skills. Digital literacy is just as important that twenty years ago was important to read and write the alphabet. Among the existing media, the Internet has experienced the fastest growth. These days, many people receive most of their

required information through a combination of texts, photos, and digital voices. We must be able to guide this complex environment in order to understand the meanings and concepts behind plenty of media messages which we receive every day and demonstrate our technical capability through using different types of media [1]. In addition to the ability of understanding the meaning and purposes of content's producers, we should produce and confirm our content and share them with others. Literacy in the digital era or, in other words, digital literacy is to some extent about the knowledge and the expansion of skills. In the area of digital literacy, the meaning of literacy is general and covers all the media in the real or virtual world, including video, audio, etc. There is no doubt that all the media can be considered as some channels for some messages which have been generated and are sent based on a series of intentions and specific goals.

Therefore, whatever we receive as a message can be a form of media literacy. Due to the existence of various types of literacy such as news literacy, cultural literacy and so on, we are always exposed to this type of messages, so it is necessary to improve our perception about media literacy.

The main objective of this study is to investigate the effect of digital literacy on female students in the age range of 14-18 years old. The

field study approach has been followed in performing this study. The results of the study have been extracted and analyzed which are explained in details in the following sections. The study focus on Some issues, including digital literacy in high schools, the opportunities and threats existing in the social networks as well as the effect of these networks on the quality of students' life. Every new and innovated technology inevitably has some intellectual, emotional and moral implications for users. Ordinary users, i.e. those users who surf on the internet in moderation, are more self-confident compared to those people without any access to the internet. In addition, the first group is not affected by the inherent side effects of using the internet.

Self-confidence and wisdom are the two most important prerequisites for using the internet. Having access to the internet can increase awareness and public information among teenagers. The results of this study reveal the fact that about 64.4 % of female students in the age range between 14 and 18 consider the internet as a lever in their educational progress. In addition, 90% of female students from the same age group announced their satisfaction about the positive effect of social networks on raising their awareness, public information as

well as enhancing the quality of time they spend on the leisure activities.

In Section 2, a discussion will be made on digital literacy among the students chosen from the aforementioned age groups. Those teens that spend their time surfing through the internet or interacting with media may have a great potential to be affected in terms of attitude or beliefs. Therefore, teachers intend to convince their students to be more responsible when interacting with media. Through this paper, it has been noted that, interacting with media in an appropriate way and emphasizing more on scientific aspects provided by the media can enhance the level of knowledge among the people and be very useful. This section provides some information associated with opportunities and threats in the digital world. In Section 3, the main results have been shown which are based on the field study method. Finally a conclusion will be made and some ideas about possible future works will be given through Section 4.

2. Digital Literacy in Schools

Nowadays, we deal with the students who are born in a society where most of the services are provided by PCs and internet. The students in such this society are to some extent addicted to their personal computers, similar to the situation was experienced in case of TV some years ago.

Here, we call the first group as PC-addicted students and the second group as TV-addicted students.

For us, these technologies are considered as some new habits without sufficient knowledge about them, particularly, if using is mandatory or for satisfying our curiosity. On the other hand, learning new technologies is necessary and it brings us a new addiction associated with technology. None of the aforementioned reasons are applicable for children or teens from the new generation. They communicate through either emails or phones and are not interested to communicate or transfer ideas through writing letters anymore

Some investigations show that enhancing digital literacy is necessary in schools. Nowadays, digital literacy is treated as an urgent priority among teachers. Technology and generation of contents are both evolved together and in the same direction. In most of the countries, various strategies are followed in order to improve the quality of digital literacy with the development of technology simultaneously.

Citizens In some developed countries such as Germany, Canada or US are educated to deal with various types of media through performing some extensive and detailing plans. They can choose which networks to use or even judge about the contents [3]. In the world, fully

occupied with various types of media where students spend a considerable amount of time interacting with media or producing digital photos and words, having digital literacy becomes more and more important.

Due to the inherent attraction of the social networks, the number of teenagers who are impressed and spend a large portion of their time surfing through these networks is rapidly increasing. Identity crises, behavioral problems, isolation, privacy related issues as well as addiction to the social networks are the main future threats arising from using social networks. However, globalization, professional team working group, business developments, formation of social groups, and leisure's are the main opportunities have been provided by social networks [4]. The various available technologies have impressed the lives of people in an unimaginable way and depth of the impacts is increasingly growing.

3. Digital Literacy of Young Iranian Girl in Smart Networks

As we know, the social context of the identity of human beings is formed under the context of social communications. Family, school, peer groups and the mass media are regarded as socialization agents. These technologies dims the importance of family and the role it plays in the direction of one's thoughts

and interests and may lead to major changes in lifestyle, values and attitudes, and generally identity of people which are worth paying considerable attention [5].

It is necessary to investigate this issue taking into account all possible aspects in order to prevent its side effects and at the same time grab the opportunities in a suitable way. In social environments such as Facebook, Tweeter, Viber etc., the user becomes a member of small social networks at the same time of being a member of a larger society. Each of these groups has its own interests and dependencies. Therefore, one has to change the identity of their communication as they connect to different social groups [6]. Although the change in the identity is temporary and limited to certain time or places, it undoubtedly has an impact on the real identity of people. In general, all components of social networks to which one is interacting can affect their mind unconsciously.

Iranian users are usually passive, while the virtual space allows content producers to be active and this new environment is not dependent on time. Location also does not matter and much of the information is readily available that previously were accessible in the hands of the few. But users do not take advantage of these facilities as well. In addition, some nested structure of cultures and loss of the language



boundaries can lead to better or worse usage of this environment.

Providing easy ways to send feedbacks, content production, and more freedom of expressing ideas are some positive points of this space. Unfortunately, most of the searched keywords are related to pornography, which indicates lack of digital literacy. Some subjects such as jokes are widely spreading through this space while, the tendency for scientific discussions is considerably low. While some educated people take better advantages of the social networks, for other ordinary users, especially those from younger generation the situation is completely different. This is not exaggerated to say; among new generation the mobile device model itself is considered as a personality characteristic through which they define their identity.

In this paper, it has been demonstrated that, female students in the age category of 14 to 18 years old spend almost 70% of their quality time in social networks. It can be said that they use their PC about 14 hours per week or on average, two hours per day. They also watch TV about 5 hours. In addition, 60% of the users consider social networks as unnecessary. A quarter of social network users eager to hear about some issues which are not noted or cover at home. The

idea of enhancing the knowledge of people by social networks has been accepted by 90% of users and 95% believe that education acts as an influential factor in better usage of social networks. Demographics demonstrate that teachers and media experts agree on the necessity of enhancing digital literacy in schools as it has not been paid enough attention so far.

The differences between the level of digital literacy in three groups of students, teachers and parents show that, teachers and parents are not qualified to guide students how to perform better in using social networks. Therefore, from the teenagers' view point the other two groups are not regarded as suitable sources. Those who use social networks are mostly from the age group of 14 to 25 years old showing that most of the social networks' users can be either classified into two groups of students or very young people whose interest in social networks will decrease as they get older.

Due to the low performance of teachers, they require to be trained in a sensible way. Therefore, parents and particularly teachers must improve their capability and digital literacy. Based on the performed research two third of the parent population are not aware of the communication channels selected by their children when using the internet. As a matter of fact, they are not able to control those

communication channels at all. In some performed investigations, a positive direct relationship between the parents' level of education and their digital literacy has been approved.

schools or even at home effectively and there is no leading institution that is responsible for enhancing digital literacy in our country. 90% of the students under study stated that people

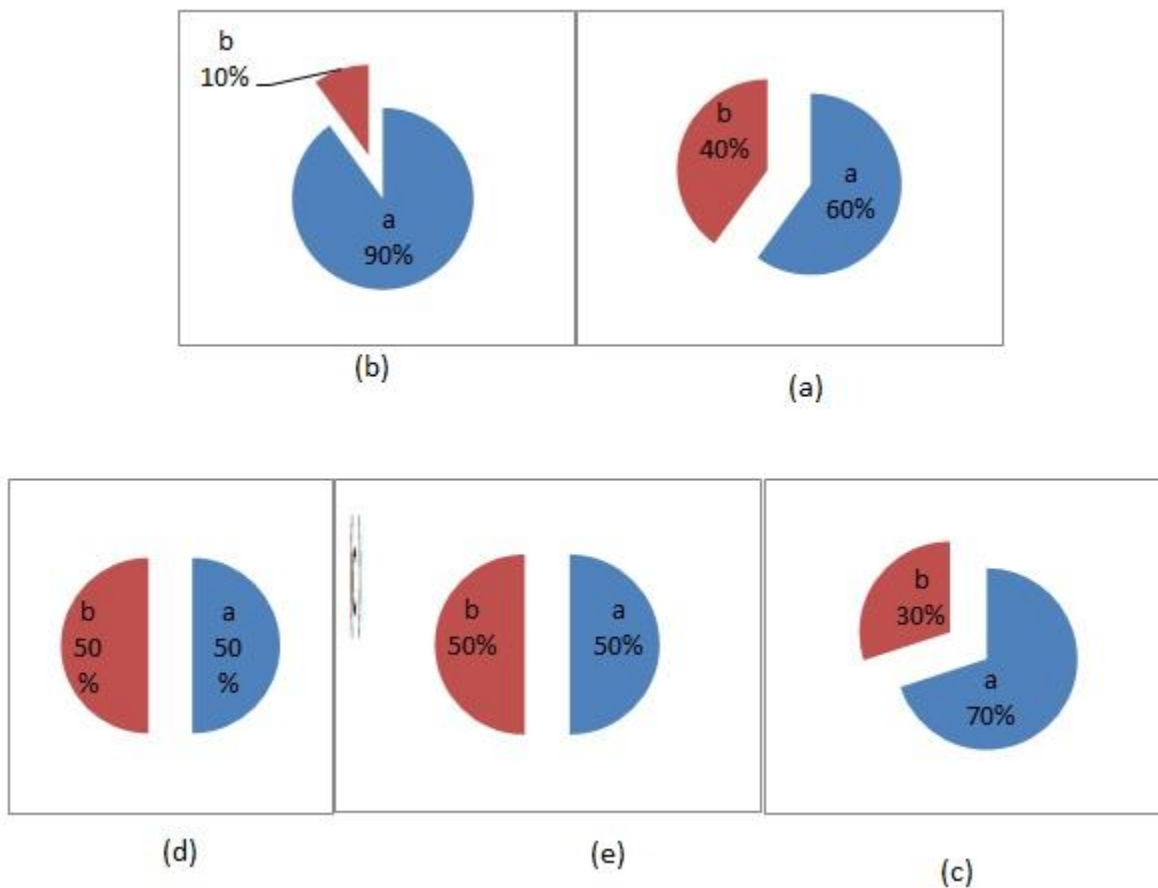


Figure 1: (a) shows the portion of time has been spent on social networks by female student between 14 to 18 years old. (b) shows the portion of the same group who believe that social networks are unnecessary. (c) shows how large is the portion of students who believe in knowledge enhancement and (d) shows the percentage of female students from 14 to 18

Most of the Iranian teenagers are interested to spend time in chat rooms rather than scientific environments. Their lack of knowledge about proper use of the internet can be attributed to the way they think. They are not trained in

communicate and interact easier through social networks.

Also half of social network users from the same age range believe that people with low self-confidence use these networks extremely.

4. Results & discussion

Digital or media literacy in virtual spaces has become a challenge for both parents and government. This type of literacy is more complicated compared writing literacy, and requires more skills. The user should refine the messages passing through various filters and attempt to recognize the good ones via his/her information. In addition, any literate person who aims at spreading their ideas through this space should have digital literacy and be able to produce

In spite of raising many controversial issues about opportunities and threats in digital space, the main focus of this paper is on the available opportunities. High school girls have been considered as the case study and the effect of digital literacy on their educational quality and level of knowledge has been studied. The results show its positive effect. Other factors have been studied and the results have been provided.

For future work, researchers can measure this with other local data, or perform the study on a wider range of students. To improve digital literacy, it is recommended to design other

methods or follow different approaches for other gender and age groups in different geographical locations.

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