

Social Networking as a Tool for Lifelong Learning with Orthopedically Impaired Learners

Metin Ersoy^{1*} and Ahmet Güneyli²

¹Faculty of Communication and Media Studies, Eastern Mediterranean University, Northern Cyprus, Mersin, Turkey

// ²Atatürk Faculty of Education, Near East University, Northern Cyprus, Mersin, Turkey // metin.ersoy@emu.edu.tr

// ahmet.guneyli@neu.edu.tr

*Corresponding author

ABSTRACT

This paper discusses how Turkish Cypriot orthopedically impaired learners who are living in North Cyprus use social networking as a tool for leisure and education, and to what extent they satisfy their personal development needs by means of these digital platforms. The case study described, conducted in North Cyprus in 2015 followed a qualitative research methodology: semi-structured interviews and document analysis were used for data collection. The study sample of 20 orthopedically impaired participants was selected from among members of the Cyprus Turkish Association for the Orthopedically Disabled which asked for volunteers. The study concluded that impaired learners typically satisfy their social and learning needs, or their need for excitement and relaxation, through social media. It is clear that the use of social networking only satisfies individual needs and does not contribute to group interdependence: if orthopedically impaired learners actively directed themselves to communicating more effectively among themselves and creating groups, they could solve personal problems through group solidarity. Social networks contribute to orthopedically impaired learners' lifelong education process: in addition to providing them with positive gratification, they also "informally" contribute to their personal education. Although the individuals who participated in this study do use social networks, more effort needs to be made within the context of North Cyprus to make use of social networks for formal education purposes.

Keywords

SNS, Lifelong learning, Orthopedically impaired, Technology, Cyprus

Introduction

In the context of human rights and lifelong learning, it can be said that social networking provide support for the development of the individual; and therefore that in the process of lifelong learning, equal opportunities should be provided for everyone to have access to social networks in their free time, for their personal development.

The main focus of this research is on the use of social networks as an educational tool by orthopedically impaired learners during their spare time in order to contribute to their personal development. The primary questions posed are:

- How do orthopedically impaired Turkish Cypriot learners living in North Cyprus use social networks as a tool of lifelong learning?
- To what extent do they satisfy their personal development needs by means of these digital platforms?

Theoretical framework

The theoretical framework of this study is based on lifelong learning, social networking sites, Uses and Gratification Theory, and the digital divide.

Lifelong learning

The view that people learn continuously throughout their lifetime is not new. The changes taking place in our daily lives, business lives, and science and technology, are occurring so rapidly that our information and skills constantly need to be renewed. It is very important that learning continues throughout one's life, without being restricted to a specific time period or space (school), so that this continuity will enable the individual to adapt to life and become more qualified (Koç, 2005). Lifelong learning provides everyone with the opportunity to benefit from the concept of

an open school, but only by moving away from being available only to a restricted age group or from providing only restricted learning events; it is seen as offering a choice which enriches community life and gives individuals an opportunity to improve their potential (Demirel, 2003).

Otten and Ohana (2009) specified eight different areas in which individuals can improve their proficiency through lifelong learning: (1) Communication in the mother tongue; (2) Communication in foreign languages; (3) Mathematical competence and basic competences in science and technology; (4) Digital competence; (5) Learning to learn; (6) Social and civic competences; (7) Sense of initiative and entrepreneurship; and (8) Cultural awareness and expression. In addition, Greany (2003) emphasizes that lifelong learning should not be restricted to adult education and Aspin and Chapman (1997) point out that lifelong learning should not be seen as equivalent to technical skill-based education or arbitrary ways of learning something during daily life.

As Otten and Ohana (2009) indicate, technological competence and digital competence are very important aspects of lifelong learning. Van Weert and Kendall (2004), Inoue (2007), and Crawford and Irving (2013) also stress the use and importance of Information Communications Technology (ICT). That is to say, although technology is used in formal education, it is obvious that it has a very special significance in lifelong learning, which is based on ICT: more learners can benefit from education, commitment to an organization or a time-frame is decreased, and individuals learn at their own speed and can correct themselves.

The literature shows that in general, work done on behalf of the orthopedically impaired is directed towards formal education, and with the aim of supporting teaching (Maguire et al., 2006). This study differs from others in that it is focused on lifelong learning, and that in addition to considering mechanisms for supporting the period of teaching and learning, it is based on the idea of personal development within the framework of making use of leisure time; as Sivan and Ruskin (2000) point out, "Leisure is a basic human right, just as education, work and health are rights, and no one should be deprived of this right for reasons of gender, sexual orientation, age, race, religion, creed, health status, handicap or economic condition." When human rights and the right to lifelong learning are taken into account, social networking sites (SNS) can provide valuable support for learners' personal development. In addition, the earlier literature generally focused on ICT, whereas in this study, the focus is especially on detailing the orthopedically impaired individual's habits and behaviors in using social media.

The orthopedically impaired and North Cyprus

The orthopedically impaired learners we studied within this diverse group were not mentally challenged; the condition of being orthopedically impaired can be defined as having one's movements limited as a result of physical problems in the body's skeletal structure.

In an interview, Günay Kibrit, the chairman of the "Cyprus Turkish Association for the Orthopedically Disabled," stated that according to figures for 2015 from the North Cyprus, Office of Works, 4,996 is the official number of disabled people in the North Cyprus, of whom approximately 1,000 are orthopedically impaired. According to a population census carried out by the North Cyprus State Planning Organization, 286,257 people were permanently resident in the country in 2011. It is estimated that in 2015 this population will exceed 300,000.

Social networking sites

Social Networking Sites (SNS) are founded on a technology known as "Web 2.0." According to Kaplan and Haenlein (2010), "Web 2.0 is a term that was first used in 2004 to describe a new way in which software developers and end-users started to utilize the World Wide Web; that is, as a platform whereby content and applications are no longer created and published by individuals, but instead are continuously modified by all users in a participatory and collaborative fashion" (pp. 60-61). When the Web 2.0 system began to be used by websites, the concept of User Generated Content (UGC) emerged. In this way, the users were placed in a position where they were not simply consumers, but also producers, able to share what they produced with a wide audience. Some examples of popular Web 2.0 based systems conducive to the creation of content by users are SixDegrees.com (1997), Myspace (2003), Facebook (2004), Youtube (2005) and Twitter (2006). Today, there is an increasing number, and an increasing

frequency of use, of sites which are typically referred to by users as “social networks” or “social media.” In 2015 the number of users of social networks is 1.96 billion; by 2018 this figure is expected to reach 2.44 billion.

Boyd and Ellison (2008) define social network sites as “web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site” (p. 211).

When social networks first emerged at the beginning of the 2000s, they gave individuals the possibility of creating a profile for themselves and making the acquaintance of other users (Ellison, Steinfield & Lampe, 2007; Lin & Lu, 2011, Kane et al., 2009). Since then, social networks have developed to such an extent that end-users are now filling them with their own content, and sharing everything from knowledge to news, from marketing to sales, from advertising to propaganda. In order to understand the attraction of social networks which bring so many people together, one must look at the results of research about the Internet conducted from the perspective of Uses and Gratification (U&G) theory.

Uses and gratification theory

The most important feature that attracts people to social networks more than to traditional media is that they are “interactive.” As Kaye and Johnson (2001) noted, internet users are more actively involved and engaged in using the Internet because of its interactivity. Uses and Gratification (U&G) theory has been making an important contribution to the literature on individuals’ use of social networks. According to Katz et al. (1973), this is based on the social and psychological origins of needs, which generate expectations of the mass media or other sources, which lead to differential patterns of media exposure, resulting in need gratifications and other consequences (pp. 510). They emphasize that U&G studies have two distinct approaches: evaluating how needs are gratified by media, and evaluating how gratifications reconstruct needs (Smock et al., 2011, p. 2323). According to Quan-Haase and Young (2010), “One of the more successful theoretical frameworks from which to examine questions of “how” and “why” individuals use media to satisfy particular needs has been the uses and gratifications (U&G) theory” (pp. 351).

U&G studies have two distinct approaches: one focusing on how needs are gratified by media, and the other on how gratifications reconstruct needs (Smock et al., 2011, pp. 2323). Severin and Tankard (2001) emphasize the psychological communication perspective in U&G theory, and point out that individuals can use mass communication tools for very different aims. Another purpose of U&G theory is to understand how mass communication tools are used by individuals to satisfy their needs, and to determine their positive and negative consequences. Ruggiero (2000), however, notes the following weaknesses of U&G theory: (i) media users may not know the reasons why they chose to use what they are using and may not be able to explain it clearly; (ii) the theory lacks internal consistency and theoretical justification and has weak predictive capabilities; and finally (iii) it is difficult to measure the gratification structure with the self-report data.

The role of SNS in orthopedically impaired learners’ life and digital divide

The “digital divide” refers to the gap created by access or lack of access to and the manner of use of technology by members of various social identity groups (Bolt & Crawford, 2000, pp. 39). The concept of the digital divide, which has been discussed since the middle of the 1990s, criticizes not only unequal access to technology between countries, but also unequal access among people living in the same country. The general literature on the subject tries to expose the factors creating a digital divide between the individual and society. At the top of the list of these factors are education (Latimer, 2009), employment (Uzunboylu & Tuncay, 2010), age (DiMaggio et al., 2004), culture (Drori & Jang, 2003), race and ethnicity (Hoffman & Novak, 1998), ethics (Hacker & Mason, 2003), internet skills (van Deursen & van Dijk, 2010), gender (Dixon et al., 2014), and rural-urban separation (LaRose et al., 2007). Thus, this divide reproduces the already extant inequalities between rich and poor, urban and rural, and an ethnic white majority and ethnic minorities (Dixon et al., 2014, pp. 991-992).

When the reasons behind the digital divide are examined, an individual's being "disabled" must be seen as an important contributing factor. Disabled people experience relative inequality in their engagement with the Internet, in terms of their physical access to it as well as their use of digital technologies and network capability. Disabled people are more likely to experience structural inequalities such as not having educational qualifications, being outside work and living in deprived neighborhoods (Sourbati, 2012, pp. 577). Despite Van Dijck and Nieborg's (2009) declaration that "all [Web 2.0] users are equally creative and are created equal" (pp. 860), it is first of all disabled individuals who are found to encounter obstacles in accessing the Internet and digital technology. The poor economic conditions of the disabled, low levels of education, and, related to this, their low level of skills in using computers, indicate the difficulties they experience in accessing the Internet and digital devices. Disabled citizens with weak financial resources struggle to buy electronic devices that can access the Internet, and even if they purchase a device, they do not become proficient in its use because of a lack of education. For this reason, as Hargittai and Walejko (2008) have pointed out, when disabled people make use of the Internet, they experience the problem of a "participation divide."

We know that Internet use contributes positively to the quality of life of the disabled. Studies of disabled learners' access to the internet have prioritized such subjects as web accessibility (Adam & Kreps, 2006), societal inequalities (Van Dijk, 2005; Witte & Mannon, 2010), and the impact of information and communication technology (Guo et al., 2005; Dobransky & Hargittai, 2006; Warschauer, 2003; Luke, 2002; Wilding, 1999). These studies suggest that "computer and Internet technologies have the potential to help provide people with disabilities access to a myriad of professional, educational, social, and economic resources. In fact, according to research by the National Organization on Disability, the Internet is having a greater impact on the lives of adult Internet users with disabilities than on those of adult Internet users without disabilities" (Taylor, 2000, pp. 28).

In particular, in a developing country like North Cyprus, where orthopedically disabled learners experience distressing situations simply when going out on the streets, the Internet takes on a special importance in their lives. Because of the problems they experience as a consequence of their orthopedic disabilities – in getting an education, finding work, and having a social life – and in order to overcome them, they feel a need for the internet and social networks. Guo et al. (2005) explain the benefits that the disabled gain for themselves by using the internet as follows: "[disabled persons] have access to a common open space, helping them break down barriers that exist in the real world physical and social environments. Internet use in turn brings about more social interaction opportunities and higher levels of satisfaction with friendships, social participation and social support. This is particularly the case for more knowledgeable users, who are ready to make optimal use of the medium and its resources" (pp. 53).

There are examples in the literature of studies which indicate that disabled learners' difficulties and problems in accessing internet are proportionally greater than those encountered by the general population (Kaye, 2000). According to Lilley (2004), using ICT undoubtedly makes both school life and life in general easier for the orthopedically disabled, and on the whole has a positive effect. But it should be understood clearly that ICT cannot work miracles, and does not have the power to take away a disability. To make a real impact on the lives of the orthopedically challenged, even after choosing the right technology, takes a certain level of patience, effort, and awareness.

Method

This research is based on qualitative analysis: qualitative research patterns are taken as a basis for a detailed analysis of the use of social networking by orthopedically disabled learners in North Cyprus, studied through data collected from face-to-face interviews.

Participants

Participants were selected through a sample survey: orthopedically disabled members of the Cyprus Turkish Association for the Orthopedically Disabled were chosen to take part in the study. As it has the largest membership in North Cyprus, this association was brought into the scope of the research. When the participants were being selected, two distinct sampling methods were followed: easily accessible and maximum diversity sampling. Because of this,

the project first of all included physically disabled individuals who were frequently making appointments to visit the Association and undergoing treatments.

A basic condition of the research was that all twenty people within the sample had access to a computer and the Internet. The number of participants and the number of years they had used the Internet were as follows: 2 people had been on the Internet for 2-3 years, 5 people for 4-5 years, and the remaining 13 for 6 years. Participants' hours of use of the internet per day were: 4 people for less than 1 hour, 7 people for two hours, and 9 for more than 3 hours. Finally, as regards their self-declared levels of competence in using the Internet: 3 people felt their competence was not adequate, 7 people said they were adequately proficient, and 10 people said they were at an advanced level.

Data collection tools

A "semi-structured feedback form" was used as a data collection tool. When this questionnaire on "Orthopedically disabled learners usage of internet and their activity in social networking" was prepared, special attention was paid to communicating effectively and productively, ensuring clarity of the questions; leaving space for the possibilities of detailed answers; and avoiding putting unnecessary pressure on the participants by asking multi-dimensional questions.

The feedback form was made up of four sections, and there was a total of 24 questions. The first section asked for the participants' demographic information. In the second section, orthopedically disabled individuals were asked generally about their usage of the Internet (their habits). The third section asked questions to determine the participants' use of social networks during their free time

In preparing the feedback form, the researchers consulted five experts from the fields of communication, computer and teaching technologies, special needs education, linguistics, and quantification and evaluation. Questions were modified or omitted based on their opinions and suggestions. The form was then tested out on a pilot orthopedically disabled individual. This pilot trial lasted 30 minutes, and in view of the results, it was decided that alternative questions or cues were unnecessary for the purposes of this study.

Procedure

Verbal permission to conduct the research was first obtained from the Chair and Assistant Chair of the Association before starting to collect data. To ensure that participation was voluntary, before the interviews, permission was obtained from the interviewees themselves: the purpose of the interviews was explained; and it was made clear to them that they could stop the interview at any time and that after the interview if they had any reservations concerning what they had said, they could choose not to have their responses used in the study. It was also explained to the participants that for ethical reasons, their names would not be used in the research. The interviews were held during 2–13 February 2015, generally during working hours (08.00-16.00), in the Association's library in Nicosia. Two researchers attended each interview together, and care was taken not to direct or lead the participants during the interviews. Individual interviews were held with the participants, (20 separate sessions): The interviews lasted an average of 30 minutes, and with participants' permission they were audio recorded and notes were taken during the sessions. Finally, the recordings were transcribed, the notes were added, and the data set for the research was prepared for analysis.

Data analysis

The content of the data gathered from the interviews was analyzed. The interview questions were taken as the basis for the study, and themes were specified and interpreted. As the findings were presented, tables were used to elaborate on some themes. In order to ensure legitimacy and accuracy in the analysis, all data were written out in detail, so the conclusions would be clear and understandable. The researchers reduced the possibility of differences of opinion to the minimum by working together at every phase of the data analysis of the interviews. Finally, the

thoughts expressed by the interviewees were frequently used as quotations; and the research conclusions were presented from these directly.

Findings and results

Social networking usage in leisure time

In this part of the study, we measured the use of social networking by the participants, and also their level of satisfaction. The disabled participants who engage in a lot of activities in their spare time generally make frequent use of the Internet and social media. Because more than half of the learners we interviewed are not working, they have a lot of free time during the day. Also, since 14 of the 20 participants are single, they have fewer responsibilities in the home, and devote significant time to social networks. Of the participants, 65% had been connected to the Internet for more than six years, and 80% of them use the Internet for more than two hours a day. The level of proficiency of the orthopedically disabled in Internet use was seen to be 85% moderate ($n = 7$) and high ($n = 10$).

The purpose of using social networking

When we examine the purposes for which the orthopedically disabled in North Cyprus use social networks, we see that individuals may use them for different reasons. Broadly speaking, the main reasons are: spending free time, having fun, and obtaining information. Other reasons are: passing time, relieving stress, acquiring knowledge, doing research, resting, learning about the problems of other disabled people in the world, letting go, sharing, gaming, watching film series, reading newspapers, having a good time, relaxing, and chatting.

The disabled learners who have difficulties in getting out of the house spend a large amount of their free time on social networks. Participant 7 (Female, 47) said she uses social networks “to fill spare time and learn things.” Some responses from the participants’ explain why some social networks, and specifically Facebook, are preferred by disabled learners. Participant 4 (Female, 45) said: “We learn everything from Facebook: who’s not feeling well, who’s had a baby.” Facebook is preferred because it is easy to access information from it, and its focus on user-generated content makes it easy for people to share things with others. By enabling the sharing of feelings, writings, poems, videos, etc., it makes it possible for people to socialize, and also get feedback from around them. Participant 11 (Female, 60) explained what these features of Facebook offer to her: “I use it to chill out and discharge, and I share my poems. I pour my feelings into my poems and I share them. They get “likes,” and that makes me happy. I express my reactions to events in the community. It makes me happy when there’s interaction. I write out what’s inside me there, and I relax.”

Activities

An important point to consider is what kind of activities orthopedically disabled people engage in on social networks in their spare time, in particular as regards lifelong education. The participants explained their main activities and goals, which in general, for those who went onto social networks to occupy their free time, including listening to music, watching films, chatting, reading newspapers, doing research to acquire knowledge, and looking at recipes.

Participants in the age group which we can consider as “digital immigrant” (Prensky, 2001) spoke of how they were bored with some of the activities on social networks. Participant 7 (Female, 47), for example, said: “I read newspapers. I’ve forgotten how to write. Social media put an end to the smell of books. I read the news that I choose to read.” At the same time, Participant 11 (Female, 60) didn’t want to stay tied down to social networks: “I wish there was a place we could go, and not the Internet. Where we could go by ourselves. I want to be free.” And Participant 13 (Female, 38) said she was fed up with chatting on social networks, and would prefer instead to meet people face-to face.

Education

From the results of our in-depth interviews, it appears that the participants did not use social networks very much in their spare time for educational purposes. While some of the participants said they used social networks to do research, acquire knowledge and read books, a large majority said they did not make use of online courses or education from social networks. Two participants who are continuing their studies at the master's level said they use the web for academic purposes, to survey the literature in their fields. Participant 6 (Male, 47) said he used it to learn about work-out methods: "I use it to develop myself in the field of sports. I use it to find ways to work out in a wheelchair and analyze opposing teams." Participant 7 (Female, 47) said she researched her illness, and so educated herself and became more knowledgeable. Participant 12 (Male, 23) said his aim in using social media was to educate himself, and that he was following new developments in desktop publishing: "I use it to do research. I watch programs on Photoshop and Corel Draw and then apply what I learn."

Effects and feelings

Effects

In this section, the research focused on the effects of social networks on the daily lives of the orthopedically disabled, and the feelings they experienced when using them. The responses indicate that the participants felt that as long as social networks are used moderately, they can serve as a positive and useful platform. In addition, participants said that the most fundamental positive effect of social networks on their daily lives had been to provide them with opportunities for "socializing and fast, cheap communication." Because social media make it possible to read others' opinions and interpretations, these media have a positive effect on disabled learners' emotions. Participant 2 (Male, 42) explained the special benefits he got from the interactivity of social networks: "I make a connection. It's important for me. Because I want to communicate and because I am active, I have connections. They respond to my books and my writings. I read about the effects of my writing." Participant 3 (Male, 39) emphasized the importance to him of the fact that with social networks you can follow things as they happen and find out what you want to know any time you choose.

From the responses it was clear that some of the disabled learners, in the "digital native" category in particular, didn't want social networks to play too great a role in their daily lives. Participant 5 (Male, 47) said that for him social networks were not a must, but also commented that social networks contribute to personal growth: "[Social networks] do have an effect on my daily life. I use them to get feedback and criticism. You develop yourself through criticism. You question yourself." Participant 11 (Female, 60) explained the effect of social networks on her daily life as follows: "There's no place we can go and travel around. You need a car to go everywhere. So I have to be in my partner's house. When he has time he takes me out. Where do people go all the time? We're killing time in the house. That's why we use social networks." From this we can see that in the daily lives of some orthopedically disabled learners, social networking functions as a platform for filling empty hours. It is clear that they are forced to stay at home more and use the Internet more because of the deficiencies in North Cyprus's architectural infrastructure and facilities for mobility.

Two of the participants raised an important point regarding dependence on social networks. Participant 13 (Female, 38) said we have to be careful when using social networks, so that we stay connected to real life: "I'm trying not to get hooked on it. So I didn't get a smart phone. I have to be in real life. Let's not lose our human feelings." Participant 16 (Female, 26) said social networks were an "addiction" for her, that she was constantly wondering what was happening on the networks and that she couldn't get by without using them.

Feelings

When we studied what the participants felt while using social networks, in general their responses indicated positive feelings. Emphasizing that social networks bring people who are far away closer, some users were excited and happy to be able to fulfill their wish to be with relatives who were far away. Some described the feelings they got from social networking as joy, laughter, cheerfulness and pleasure. The effects of social networking on the feelings of the orthopedically disabled subjects of the study are shown in Table 1.

Table 1 illustrates the wide range of feelings experienced by the orthopedically disabled when they are using social networks. These reveal the satisfaction provided to these individuals by the networks. It can also be seen that social networks are both a need and a necessity for the disabled. Due to the fact that they provide happiness, pleasure, excitement, a feeling of security, and many other different feelings, social networks play an important role in filling free time for the orthopedically disabled. Participant 7 (Female, 47) said that social networks provide a sense of safety for her as a disabled person: “When I go to places, I constantly check to see if there’s wireless internet. You feel that you’re more secure, you get the strength of knowing ‘I can reach everything’.” The feeling of safety is especially important for orthopedically disabled people who need assistance from others. This means that in future the disabled will make more use of social networks to be able to reach the person they want when they want, not only because of the ease, but also because of the speed with which one can ask for help.

Table 1. Orthopedically impaired learners’ feelings while using social networks

Participants	Feelings
Participant 1 (Female, 39)	“I feel happy. When they’re not there I feel empty. Like when Facebook was down for a few days.... there was a problem with the telephone.”
Participant 2 (Male, 42)	“Depending on your mood at the time, you can experience anything.”
Participant 3 (Male, 39)	“It’s really exciting and I like it. It’s a great communication tool. It’s exhilarating when you use it to do what you want.”
Participant 5 (Male, 47)	“There’s a sense of satisfaction. You share, and when you read the comments you get a feeling of satisfaction. You believe you did something right. We question our own inner worlds. We criticize.”
Participant 7 (Female, 47)	“There’s definitely a great emptiness [when there’s no Internet]. When I go to places, I constantly check to see if there’s wireless internet. You feel that you’re more secure, you get the strength of knowing ‘I can reach everything’.”
Participant 11 (Female, 60)	“You go into a completely different world; your mind changes. I forget the things that bother me. I get rid of stress, and I become happy. When I write, expressing myself and my feelings, and then think back, it seems like I’ve raised awareness [about the disabled]. I become happy when I write down my feelings.”
Participant 13 (Female, 38)	“I don’t get very emotional. I try not to get carried away. I don’t get jealous.”

Problems

The orthopedically disabled participants who were “digital natives” indicated that they didn’t experience many problems when using the Internet in their spare time. These individuals complained more about deficiencies in the technological infrastructure and the slow speed of the Internet. However, disabled “digital immigrant” users spoke of the skills needed to use the technology, their lack of knowledge, and their need for education. While Participant 6 (Male, 47) said “I have problems because of the skills needed to use this,” Participant 4 (Female, 45) complained about the impatience of the people she tried to get help from: “I want help from my children but I can’t get the help I need. The children are impatient. When we don’t understand things they don’t want to explain them to us again. They say ‘we showed you that before’.” Participant 9 (Female, 50) had similar problems: “I’m having problems using technology. I get help from my children, but they explain things quickly and we don’t understand.” It is clear that when disabled people have problems using the Internet, the people who are closest to them, their family members come to their help. But because of the impatience and rapid explanations they get on how to solve problems from the people whom they are supposed to be getting help from, this isn’t always helpful. On the other hand, Participant 7 (Female, 47) said she was trained to use the technology for three months by a cousin: “When I’m using [the Internet], I have problems. I have a cousin who’s an expert. He taught me for three months. They grew up with these devices.” The comment that “They grew up with these devices” shows that the problems arise for people who weren’t born into the technology. From the responses we received, it can be seen that in the “digital native” category, orthopedically disabled learners aged 40 and above are lacking the knowledge to use the Internet and social networks. In addition, because these individuals’ skills in using electronic devices are weak, it is clear that that have

to be given short-term training and education in order for social networks to contribute more to filling their spare time, to making their lives easier, and to not add more obstacles to those that already exist. Educational issues such as digital literacy, social media literacy and Internet use have to be worked on and the problems people are experiencing have to be addressed.

Conclusions

In this study, we researched the behaviors of orthopedically disabled learners, focusing on their use of social networks as part of their lifelong educational development goals. According to their own accounts, their habits with respect to social networks are determined by their aims. In general, disabled learners who use social networks do so in order to pass time, listen to music, watch films, chat, read newspapers, research to learn new things, and look at recipes. Even if they do not use social networks directly for educational purposes, they still learn from them. Heo and Lee (2013) define this kind of learning from social networks as “non-formal” education. In such non-formal learning media, user-generated content can be shared with ease. Sharing in social networks, and interactivity with comments and replies, have a positive effect on disabled learners’ sense of socialization, education and general culture.

Social networks contribute in lifelong education to the personal development of orthopedically disabled learners; Dinçyürek et al. (2011) confirm that additional usage of computers by the orthopedically challenged contributes to their development and to improvement of their conditions. Social networks not only provide gratification to the orthopedically disabled in a positive way; they also contribute “informally” to their education. There is no doubt that awareness needs to be increased of the importance of social networks in raising knowledge levels and providing personal development as part of lifelong learning. And although the people interviewed in this study used social networks, more work has to be done in North Cyprus on the subject of more effective usage in the context of formal education.

It can be concluded from the responses received that disabled learners use social networks to satisfy their needs for socialisation, learning, excitement, and relaxation. Through applying Uses and Gratification Theory, Parker and Plank (2000) and Tan (1985) demonstrated that such individual needs were satisfied by the media. Of course, this process has evolved as social networks have come to be used more and more in the daily lives of individuals. Individuals are no longer simply passive “consumers” of media for their needs; now, through the user-generated content features of social networks they have become active “producers.” This active process has led to a positive transformation in terms of usage of social networks and gratification, for orthopedically disabled people, who spend most of their time at home. Dobransky and Hargittai (2006) explain this positive effect as follows: “In much the way that medical and other forms of assistive technology have improved the physical functioning of people with disabilities, ICTs have been viewed as tools that enable people with disabilities to escape the isolation and stigma that sometimes accompany their disabilities” (pp. 315).

Yet in spite this, it can be said that for the orthopedically disabled, social networks are limited to satisfying individual needs, and do not fulfill the need for group cooperation and gratification; if the orthopedically disabled in North Cyprus focused on forming groups, personal problems could be resolved through group solidarity. It can be said that the architectural and public circulation deficiencies in the country also force the orthopedically disabled to stay home and use the Internet more. Digital immigrants who participated in the study did not want to be dependent on social networks, and expressed a preference for socializing in person, face-to-face, in different spaces. In addition, they did not want to be affected too much in their daily lives by social networks.

While this study shows that orthopedically disabled digital natives do not encounter many problems while using the Internet during their free time, disabled digital immigrants spoke of their need for education because of their lack of technological skills and knowledge. When they encounter a problem with using the Internet, the people who are closest to them, their family members, come to their help.

Orthopedically disabled learners believe that because of their disabilities and their inability to go out often, they become more dependent on the Internet and social networks, and spend more time on social networks in their free time. The fact that they do not have professions (are unemployed), or that if they became disabled later in life, they cannot continue in their professions, determines how frequently they visit the Internet and what sites they visit. Many say that if they had been working, they would have had less free time, and that the Internet sites they visit would

have been related to their professions. They also stress that if they were not disabled, they would have gone out more, traveled, gone to school or work, visited their friends, or gone out to a cafe or cinema.

In North Cyprus, a great many orthopedically disabled learners are unable to get an education and remain unemployed as a result of their disability. For this reason, they feel a need to be educated in digital literacy. In addition, especially among the older digital immigrants, orthopedically disabled learners have problems with skills in using computers and social networks. There is a need for educational programs for such disabled learners, who do not feel adequate in these areas.

References

- Adam, A., & Kreps, D. (2006). Web accessibility: A Digital divide for disabled people? In E. Trauth, D. Howcroft, T. Butler, & J. DeGross (Eds.), *IFIP International Federation for Information Processing, Social Inclusion: Societal and Organizational Implications for Information Systems* (pp. 217-228). Boston, MA: Springer.
- Aspin, N. D., & Chapman, D. J. (1997). *The School, the community and lifelong learning*. London, UK: Cassell.
- Bolt, D. B., & Crawford, R. A. (2000). *Digital divide: Computers and our children's future*. New York, NY: Bantam.
- Boyd, D. M., & Ellison, N. B. (2008). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication, 13*, 210–230. doi:10.1111/j.1083-6101.2007.00393.x
- Crawford, J. C., & Irving, C. (2013). *Information literacy and lifelong learning: Policy issues, the workplace, health and public libraries*. Oxford, UK: Chandos Publishing.
- Demirel, Ö. (2003). *Kuramdan uygulamaya eğitimde program geliştirme* [Curriculum development from theory to practice] (5th ed.). Ankara, Turkey: PegemA Publishing.
- DiMaggio, P., Hargittai, E., Celeste, C., & Shafer, S. (2004). From unequal access to differentiated use: A Literature review and agenda for research on digital inequality. In K. Neckerman (Ed.), *Social inequality* (pp. 355–400). New York, NY: Russell Sage Foundation.
- Dinçyürek, S., Arsan, N., & Çağlar, M. (2011). The Orthopaedically handicapped and computer usage: The Case of TRNC. *The Turkish Online Journal of Educational Technology, 10*(1) 209-215.
- Dixon, J. L., Correa, T., Straubhaar, J., Covarrubias, L., Graber, D., Spence, J., & Rojas, V. (2014). Gendered space: The Digital divide between male and female users in internet public access sites. *Journal of Computer-Mediated Communication, 19*, 991–1009. doi:10.1111/jcc4.12088
- Dobransky, K., & Hargittai, E. (2006). The Disability divide in internet access and use. *Information, Communication & Society, 9*(3), 313-334. doi:10.1080/13691180600751298
- Drori, S. G., & Jang, S. Y. (2003). The Global digital divide: A Sociological assessment of trends and causes. *Social Science Computer Review, 21*(2), 144–161.
- Ellison, B. N., Steinfield, C., & Lampe, C. (2007). The Benefits of Facebook “friends”: Social capital and college students’ use of online social network sites. *Journal of Computer-Mediated Communication, 12*, 1143–1168.
- Greany, T. (2003). What makes an effective lifelong learner. *Adults Learning, 14*(7), 19.
- Guo, B., John, C. B., & Huang, J. (2005). A Common open space or a digital divide? A social model perspective on the online disability community in China. *Disability & Society, 20*(1), 49-66. doi:10.1080/0968759042000283638
- Hacker, K. L., & Mason, S. M. (2003). Ethical gaps in studies of the digital divide. *Ethics and Information Technology, 5*, 99–115.
- Hargittai, E., & Walejko, G. (2008). The Participation divide: Content creation and sharing in the digital age. *Information, Communication & Society, 11*(2), 239–256. doi:10.1080/13691180801946150
- Heo, G. M., & Lee, R. (2013). Blogs and social network sites as activity systems: Exploring adult informal learning process through activity theory framework. *Educational Technology & Society, 16*(4), 133–145.
- Hoffman, L. D., & Novak, P. T. (1998). Bridging the racial divide on the Internet. *Science, 280*, 390–391.
- Inoue, Y. (Ed.) (2007). *Online education for lifelong learning*. Hersey, PA: Information Science Publishing.

- Kane, G. C., Fichman, R. G., Gallaughar, J., & Glaser, J. (2009). Community relations 2.0. *Harvard Business Review*, 87, 45–50.
- Kaplan, M. A., & Haenlein, M. (2010). Users of the world, unite! The Challenges and opportunities of social media. *Business Horizons*, 53, 59–68.
- Katz, E., Gurevitch, M., & Haas, H. (1973). On the use of the mass media for important things. *American Sociological Review*, 38(2), 164–181.
- Kaye, H. S. (2000). *Computer and internet use among people with disabilities, Disability Statistics Report 13*. California, CA: National Institute on Disability and Rehabilitation Research.
- Kaye, B. K., & Johnson, T. J. (2001). *A Web for all reasons: The Uses and gratifications of internet resources for political information. Telematics and Informatics*, 21(3), 197-223.
- Koç, G. (2005). Yaşam boyu öğrenme [Lifelong learning]. In Ö. Demirel (Ed.), *Eğitimde yeni yönelimler* [New trends in education]. Ankara, Turkey: PegemA Publishing.
- LaRose, R., Gregg, L. J., Strover, S., Straubhaar, J., & Carpenter, S. (2007). Closing the rural broadband gap: Promoting adoption of the Internet in rural America. *Telecommunications Policy*, 31(6/7), 359–373.
- Latimer, C. (2009). Understanding the complexity of the digital divide in relation to the quality of House campaign websites in the United States. *New Media & Society*, 11(6), 1023–1040.
- Lilley, C. (2004). A Whole-school approach to ICT for children with physical disabilities. In L. Florian, & J. Hegarty (Eds.), *ICT and special educational needs: A Tool for inclusion* (pp. 80-96). Berkshire, UK: McGraw-Hill International.
- Lin, K. Y., & Lu, H. P. (2011). Why people use social networking sites: An Empirical study integrating network externalities and motivation theory. *Computers in Human Behavior*, 27, 1152–1161.
- Luke, R. (2002). AccessAbility: Enabling technology for life long learning inclusion in an electronic classroom – 2000. *Educational Technology & Society*, 5(1), 148-153.
- Maguire, M., Elton, E., Osman, Z., & Nicolle, C. (2006). Design a virtual learning environment for students with special needs. *Human Technology*, 2(1), 119-153.
- Otten, H., & Ohana, Y. (2009). *The Eight key competencies for lifelong learning: An Appropriate framework within which to develop the competence of trainers in the field of European youth work or just plain politics?* Bonn, Germany: IKAB. Retrieved from http://www.ikab.de/reports/Otten_Ohana_8keycompetence_study_2009.pdf
- Parker, B. J., & Plank, R. E. (2000). A Uses and gratifications perspective on the Internet: As a new information source. *American Business Review*, 18(2), 43–49.
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon, MCB University Press*, 9(5), 1-6.
- Quan-Haase, A., & Young, A. L. (2010). Uses and gratifications of social media: A Comparison of Facebook and instant messaging. *Bulletin of Science, Technology & Society*, 30(5), 350–361. doi:10.1177/0270467610380009
- Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass Communication and Society*, 3(1), 3–37.
- Severin, W. J., & Tankard, J. W. (2001). *Communication theories: Origins, methods and uses in the mass media* (5th ed.). New York, NY: Longman.
- Sivan, A., & Ruskin, H. (Eds.) (2000). *Leisure education, community development, and populations with special needs*. Wallingford, UK: CABI Publishing.
- Smock, A. D., Ellison, N. B., Cliff, L., & Wohnb, D. Y. (2011). Facebook as a toolkit: A Uses and gratification approach to unbundling feature use. *Computers in Human Behavior*, 27, 2322–2329.
- Sourbati, M. (2012). Disabling communications? A Capabilities perspective on media access, social inclusion and communication policy. *Media, Culture & Society*, 34(5), 571–587. doi:10.1177/0163443712442702
- Tan, A. S. (1985). *Mass communications theories and research*. New York, NY: Macmillan.
- Taylor, H. (2000). The Harris Poll #30: How the internet is improving the lives of Americans with disabilities. Retrieved from <http://users.ha.uth.gr/tgd/pt0501/06/Chapters/Extras/Harris.html>
- Uzunboylu, H., & Tuncay, N. (2010). Divergence of digital world of teachers. *Educational Technology & Society*, 13(1), 186–194.

van Deursen, A., & van Dijk, J. (2010). Internet skills and the digital divide. *New Media & Society*, 13(6), 893–911. doi:10.1177/1461444810386774

Van Dijck, J., & Nieborg, D. (2009). Wikinomics and its discontents: A Critical analysis of Web 2.0 business manifestos. *New Media & Society*, 11(5), 855-874. doi:10.1177/1461444809105356

Van Dijk, J. (2005). *The Deepening divide inequality in the information society*. London, UK: Sage Publications.

van Weert, T. J., & Kendall, M. (Eds.) (2004). *Lifelong learning in the digital age: Sustainable for all in a changing world*. Boston, MA: Kluwer Academic Publishers.

Warschauer, M. (2003). *Technology and social inclusion rethinking the digital divide*. Massachusetts, MA: The MIT Press.

Wilding, J. M. (1999). Use of IT with learning-disabled populations: problems and challenges. *Educational Technology & Society*, 2(4), 130-133.

Witte, J., & Mannon, S. (2010). *The Internet and social inequalities*. New York, NY: Routledge.

Copyright of Journal of Educational Technology & Society is the property of International Forum of Educational Technology & Society (IFETS) and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.