Teacher Candidates' Opinions Regarding Instructional and Safe Use of Social Networks and Internet Addiction Risk Levels

Enis Fasli [1], Fezile Ozdamli [2]

[1]European University of Lefke,Lefke, Cyprus
[2]Near East University, Cyprus

Abstract –In conjunction with the development and advancement of internet technologies, social networking sites have created a socialization environment. Instructors point out that these tools must be used as an active and different form of communication with students. Also, participation of the students through social networking sites should be encouraged. However, the risk of internet addiction has also become widespread on the increase use of social networks. The aim of this research is to "determine the opinions of teacher candidates on the use of social networking sites in education and Internet addiction risk levels". General survey model was used in this research in order to determine the opinions regarding social networks of teacher candidates from the education faculties in the Turkish Republic of Northern Cyprus and figure out their internet addiction risk levels. "Use of Social Networks in Education Scale" developed by Ozturk and Akgun and "Internet Addiction Test" developed by Young were used in this research. According to the results of the study, it has been figured out that almost all of the teacher candidates think that sharing information through social networking sites is either partially safe or not safe. Besides, most of the teacher candidates feel anxious about keeping information as confidential. Another important result is that teacher candidates are internet users at an average level. It also shows that they might spend too much time on the internet however they use internet in a controlled manner.

Keywords – Teacher candidate, internet addiction, social network

1. Introduction

In the current information and technology age, the rapid developments in information and communication technologies have advanced in education area as in all the areas of life. Ozgur [1] stated that the increase of Internet service providers and parallel to this, the decrease of Internet prices have increased individuals' Internet use day by day [2].The rapid development of Internet infrastructure in the world has facilitated information sharing on the Internet as well [3,4]. Rapid sharing of all kinds of information has led to the need to abandon the traditional approaches in education and to integrate technological developments into education system.

In conjunction with the development and advancement of internet technologies, social networking sites have created a socialization environment [5]. Kara and Coşkun [6] defined social networking sites as virtual environments that enable individuals to interact with each other by creating a space for themselves. Can & Kaya [7] defined Social Media as a highly interactive platform that uses mobile devices and other web-based technologies to bring people, groups, and communities together for sharing media and discussion.

Social sharing networks which simulate a social environment based on sharing restructure the actions related with socialization and sociability by triggering social interaction constituted with many sharings such as emotion, thought, picture and video of the individuals. Nevertheless, it is emphasized that adolescents and adults mostly use social networks such as Facebook, Myspace, YouTube, weblogs and wiki to open their lives to friends and introduce themselves to others rather than to make research or obtain information [8]. On the other hand, because of the large number of social networking sites the users and the instructors point out that these tools must be used as an active and different form of communication with students and surely the

participation of the students through social networking sites should be encouraged [9].

Valenzuela, Park & Kee [10] noted that there is a positive relationship between the frequency of Facebook use and life satisfaction. However, Kalpidou, Costin & Morris [11] pointed out that the time spent on Facebook is related to low self-esteem and reduces life satisfaction. However, the risk of Internet addiction has also increased based on the increase in the use of the social networks. Positive and negative consequences of Internet use are examined since the Internet use has become more prevalent and the number of users has increases day by day. While some research has revealed that Internet use has positive sides, some research in the literature has also revealed that it also has negative effects [12]. Internet addiction is a phenomenon which is seen as a tsunami. Not surprisingly, it has spread rapidly after Facebook, Myspace and Friendster. In recent years new concepts have been added to different addictive behaviours. Blogs or social networking sites are a part of our lives. Thus, terms such as "overuse", "dependency", "addiction" and "problematic use" have entered the literature. Social networking sites are one of the most widely used social media channels and the "social networking sites dependency" is at the forefront. It is generally used to indicate the negative aspects of social networking sites. In particular, social networking addiction is a lot of time spent in SNS [7].

In a study conducted with 2257 university students in England, 3.2% of the students were classified as internet addicts. Especially, online shopping and social activities increase the risk of being addicted to Internet [12].

In the light of the information given above, the opinions of teacher candidates who are future teachers regarding social networking sites which are mostly used by adolescents and adults are to be investigated. It can be stated that there is a need to reveal the opinions of teacher candidates about issues such as positive-negative effects of social networking sites on students, how they can be used in education, usage frequency of these sites, type of shared information, whether information sharing is perceived as safe or not and usage aim of these sites. The aim of this research is to "determine the opinions of teacher candidates on the use of social networking sites in education and internet addiction risk levels of teacher candidates".

The following sub-aims were developed based on this aim:

• What are the practices and the features that teacher candidates use in their social networking sites?
• Are the teacher candidates concerned about the safety of sharing information on social networking sites and the confidentiality of private information? Are there any precautions about this issue?
• What are the Internet addiction risk levels of teacher candidates?

Social Media in Education

Today's students are defined as digital natives or Net Generation members because they are all born in the digital age and started interacting with technology at an early age. The use of Internet and social networks is part of daily routines of the individuals [13]. Pellas [14] indicated that dissemination and exploitation of virtual environments in universities have been disclosed from their widespread acceptance as candidate learning platforms. Individuals often prefer to communicate over the Internet with mobile devices [15]. In addition, social network sites such as Facebook and Twitter make Internet usage more attractive. Social networks represent a broad sense of enabling users to create, share, interpret, and discuss digital content [16]. It is also stated that they are "dynamic", "interactive", "democratic", "individual-centered", "social" and "adaptable" [17]. For this reason, social networks allow learning environments to be designed more socially and collaboratively. Balasubramanian & NitinFukey [18] stated that social networks are the perfect communication tools for social interaction, speech, cooperation and the formation of knowledge. Many researchers can be used in addition to classroom activities to support social networking learning activities and to help students stay in touch with each other and with their teachers in a collaborative effort. Mao [19] stated that social media can be categorized as:

-Social networking tools for instant messaging (Facebook, Tumblr, Skype and so on)

-Social media or sharing tools such as blogs, wikis, or Twitter; tagged tools like Symbaloo, Declarious, Bookmarking or Diggo,

-Social and content (calendar, questionnaires and other tools) management tools such as Edmodo or Moodle,

- Virtual worlds and gaming environments like WeeWorld and Playstation Network.

Yu et. al. [20] have indicated that undergraduate students have achieved positive effects on their learning in the pedagogical studies of social networks.

Internet addiction

Young [21] stated that he started his first studies on the Internet addiction while studying 600 cases such as job loss, relationship problems, academic and financial problems due to the internet. Even though the Internet offers many tools and features, unconscious, uncontrolled, and excessive use poses a great risk to children and adolescents who have characterized all users. Unconscious and uncontrolled use of the internet can lead to academic failures, anxiety, depression, loneliness, bullying, criminal tendency, diminished quality of life and other psychological problems in the individuals [1]. Servidio [22] stated that the popularity of academic activities, especially by communicating through social networking sites, has increased, but that excessive use of the Internet by scientific studies may be associated with adverse and problematic behaviours. Many studies have shown that students do not use the Internet extensively or appropriately, resulting in Internet addiction [23]. Malaket. et. al [23] suggests that Internet Addiction has become a public health issue that cannot be ignored. Researchers have indicated that internet addiction is related to age, family income, parents, academic performance, anxiety and depression [24,25]. Ko, Yen, Yen, Chen, & Wang [26] reported the main symptoms of Internet addiction as uncontrolled use, impulsive use desire, intolerance to detachment and deterioration in decision-making ability.

2. Method

In this study, the general survey model was used to determine teacher candidates' use of social networking sites in education faculties in the Turkish Republic of Northern Cyprus and to determine Internet addiction risks. The stratified random sampling method was employed in order to select the sampling. The working group is composed of 832 teacher candidates from the education faculties of 6 different universities in the TRNC. The return rate was 92% and 832 usable questionnaires were available for analysis. 52% of the teacher candidates participating in the study are females.

Instruments and Procedure

In the study, the use of "social networks in education" scale was used only after obtaining permission.

In order to reach the purpose of the research, "Social networks in education" scale that was developed by Oztürk and Akgun[27] was used. The reliability factor of the scale consisting of 67 items was calculated as 915. The Internet addiction test developed by Kimberly Young [21] was used to determine the level of Internet addiction risk of teacher candidates. The reliability factor of the test was calculated as 903. Before applying the scales, the researcher got permission for the application and set the application hours in advance. Data collection tools were applied to the students in the classroom environment before the course started.

The following scorings were taken into account in determining the levels of Internet addiction:

0-20 points: No Internet addiction. Controlled use is a concern.

Between 20-49 points: It means an average Internet user. Sometimes she/he may spend a lot of time on the Internet, but he/she has control over the use of the internet.

Between 50-79 points: Due to the Internet, occasional or frequent problems occur. Think about the effects of these problems on his/her life.

Between 80-100 points: The use of Internet causes major problem/problems in his/her life. Remove the effects of the Internet on his/her life and identify problems that are directly related to his/her use of the Internet.

3. Results

Social Networking Sites Usage Situations

When the results obtained to determine the use of social networking sites by teacher candidates are examined, 65.4% of the teacher candidates are connected to social networking sites every day, 19.6% a few times a week and 3.4% once a month. In addition, 11.7% of the teacher candidates participating in the study are connected to mobile devices and continuous social networking sites. When daily use hours of teacher candidates are examined, 38.6% use 1-3 hours, 21.4% use 3-5 hours and 5.5% use more than 7 hours.

As a result of the analysis conducted to determine the characteristics of teacher candidates used in social networking sites, it was determined that the teacher candidates use mostly messaging and photo sharing features.

Table 1. Application and characteristics of teacher candidates used in social networking sites

Applications	F	%
Messaging	622	74.8
Photo	597	71.8
Video	481	57.8
News	452	54.3
Notifications	301	36.2
Activities	279	33.5
Games	271	32.6
Groups	267	32.1
Groups	233	28.0
Discussion	227	27.3
Notes	193	23.2

As evidenced by the findings obtained the teacher candidates use social networking sites the most to communicate by messaging. The feature that teacher candidates use the least is the discussion and notes feature.

Also, 73.4% of the teacher candidates stated that they are members of groups on social networking sites. 85.9% were made to student groups, 68.6% to interest groups such as hobby, sports, music and politics, 53.8% to organization and foundation groups and 35% to Internet and technology related groups. According to this finding, we can say that the vast majority of teacher candidates are members of groups of students related to education. When examining the share status of teacher candidates, 85.8% share videos and photos over social networking sites, 59% share articles, articles and news content, 40.9% share educational and instructional information, 38.1% share instantaneous status reports, and 12.4% share information about products and services.

Teacher candidates' concerns about the safety of social networking sites

When opinions of the teacher candidates about the safety of information sharing on social networking sites, 90.7% of the teacher candidates indicated that information sharing on social networking sites is partially safe or not safe and only 9.3% of them think that information sharing on social networking sites are safe.

Nevertheless, the results showed that 82.5% of the teacher candidates stated that they feel anxious about keeping private information as confidential and 17.5% of them revealed that they do not feel anxious about this issue. Table 2 shows the precautions teacher candidates take to ensure personal information security.

Table 2 Safety precautions of teacher candidates

Precautions	F	%
Not sharing personal information	444	53.4
Not accepting requests from unknown people	440	52.9
Not communicating with unknown people	429	51.6
Using safe scanner	413	49.6
Using security software	287	34.5
Not using private applications	263	31.6
Not opening videos and photographs	184	22.1
I do not take any safety precautions.	37	4.4

As it can be seen from the table above, teacher candidates indicated that they take precautions such as not sharing personal information (53.4%), not accepting requests from unknown people (52.9%) and not communicating with unknown people (51.6%). Only 4.4% of them indicated that they do not take any safety precautions.

Information and files that teacher candidates avoid, giving details about social networking sites can be seen from the table below.

Table 3: Teacher candidates avoiding giving information

Information	F	%
ID information	636	76.4
Contact information	416	50.0
Photographs	202	24.3
Job/Occupational Information	90	10.8
Political views	266	32.0
Marital Status	163	19.6
Familial Information	313	37.6
Educational Status	54	6.5
I do not hide any information.	41	4.9

As seen in Table 3, most of the teacher candidates avoid sharing their identity and contact information on social networking sites. However, the vast majority of teachers do not avoid sharing family, work/profession, educational information and political views on social networking sites. Another 5% does not care about sharing any information.

Internet Advisory Risk Levels of Teacher Candidates In order to determine whether teacher candidates have the risk of Internet addiction or not Young's Internet addiction test was used. The mean score of teacher candidates obtained from the Internet addiction test is 45. While this score reveals that teacher candidates are Internet users at an average level, it also shows that they might spend too much time on the Internet however they use Internet in a controlled manner.

One way analysis of variance (One Way ANOVA) was applied to determine whether there is a meaningful difference between the Internet addiction risks of teacher candidates and hours of use of social networking sites.

In Table 4, descriptive data related to Internet addiction risks were given to teacher candidates with internet usage hours.

Table 4 Internet addiction test results according to usage hours of teacher candidates' social networking sites

Usage hours	N	$\overline{X}$	SS
Less than one hour	179	32.882	18.252
1-3 hours	321	42.757	18.925
3-5 hours	178	54.893	12.364
More than 5 hours	154	52.396	15.862

As seen in the table above, teacher candidates who use social networks for less than one hour a day or one to three hours a day are average Internet users, while teacher candidates who use social networks for more than 3-5 hours or 5 hours occasionally have frequent or frequent problems due to the Internet.

The results of variance analysis (ANOVA) conducted to determine whether there is a meaningful difference between Internet users 'risk levels of teacher candidates' social network use hours and Internet addiction risk are given in Table 5.

Table 5 Internet Dependence of Teacher Candidates by Internet Usage Hours ANOVA Test Results

Sum of square	df	Mean square	F	P	Explanation
53743.4	3	17914.4			
239473	828	289.219	61.9	.000	P<0.05
29321	831				

As seen in the table above, Internet addiction risk levels differ according to Internet usage hours of teacher candidates (F (3; 828) = 61.941, p <0.05). According to the findings obtained, there are significant differences between all other teacher candidates in favour of those who use the Internet less than one hour a day. In addition, 1-3 hours for Internet users in favour of 3-5 hours and more than 5 hours are seen to use more.

4. Discussion and Conclusion

In addition, teacher candidates often use social networking features such as messaging, photos, and videos. The feature that teacher candidates use the least is the discussion and notes feature. According to this result, we can say that the main purpose of using the social networking sites is to communicate with the friends of the teacher candidates.

According to the results obtained by the non-working, the social sharing sites that teacher candidates use most are Facebook and Twitter. In addition, it has been determined that more than 5 years have used social networking sites.

According to the results obtained, almost near a half of the teacher candidates found that sharing information on social networking sites was either partially safe or not safe at all. It has also been determined that large majority are concerned about the confidentiality of information.

It has emerged from the results obtained that teacher candidates have taken measures such as not sharing personal information in order to protect themselves from threats on social networking sites. According to the results, we can say that the teacher candidates are aware of the threats in social networking sites and that they are taking the necessary measures in part. Seminars can be given by experts about proposals for security measures that can be taken on social networking sites. In addition, teaching staff can use social sharing sites in their lessons to make practices that will be an example to teacher candidates.

The Internet and its social networking today remove many difficulties in terms of temporal and spatial sense. In this context socialization is an important complementary element. Through the use of social networking among people in the society, people are having a social relationship or maintaining the existing relationships. Social networks affecting society are changing the behaviours and the habits of people. As a result, it is found that the teacher candidates participating in the study are average Internet users. The Internet users are controlled even though they spend a lot of time on the Internet according to the results obtained for the Internet addiction risks of the teacher candidates. According to these results, we can say that the vast majority of the teacher candidates do not risk Internet addiction and they are controlled Internet users.

Another result obtained from the study is that Internet addiction risks are different according to the frequency of Internet usage of teacher candidates. Teacher candidates who use the Internet more often have found to be at a greater risk. Other studies in the literature are parallel to these results and [23] study has similar results. Similar results were seen in her work in [28]. Educational support should be given to teacher candidates who are at risk of Internet addiction by considering the purpose of using the Internet and how they should benefit. In addition, activity can be organized among the teacher candidates in order to be aware of Internet addiction and raise awareness about it.

As with every study, this study has some limitations. Only one of these candidates has been involved in the study, and can be included in future studies by teachers and students studying in other departments.

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