

Frequency of Internet, Social Network and Mobile Devices use in Prospective Teachers from Faculty of Education

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Abstract – The basic aim of this study was to determine the relationship between university students' frequency of internet use, duration of internet connection, environments that they connect to the internet, duration use of mobile devices, frequency of social networking leisure activities and internet addiction levels. The participants included a total of 363 university students of whom 255 were female and 108 were male. Quantitative research methods were used in this study. A survey was developed by the researchers and administered to the students. Based on statistical analysis; it was revealed that the frequency of internet use was every day throughout the week, students frequently stayed connected to the internet at home with their computers and the frequency of mobile devices and social network use was found as "Always". In addition, university students stated that they connected to the internet in their leisure time.

Keywords – Internet use, Internet addiction, Mobile devices, Social network.

1. Introduction

Rapid advancement of the technology and developments in the information and communication technologies have made the internet an indispensable component of the individuals. It is seen that internet

is the most rapid and effective way of accessing information in the 21st century. Internet is also a social environment supporting the communication between billions of people from different distances and it continues to develop and support this communication. At this point, internet network addresses young population group with its' rich information and guides them towards itself [15].

According to the report of the Household Information Technologies Use Research of TUIK (Turkey Statistics Institution) [22] which validated the present research in Turkey as well, the age group in which the computer and internet use is the highest in Turkey is the 16-24 age group. According to the same report, social media use was the first aim among the aims of using internet. In the first three months of 2016; 80.9% of the individuals using the internet created a profile, sent message or shared content such as photograph through the social media; 70.2% of them used internet for reading online news, newspaper or magazine; 66.3% of them looked for information related with health; 62.1% of them uploaded content such as text, image, photograph, video, music to share via any website and 59.4% of them looked for information about property and services. It was also revealed that 87.1% of the individuals using internet between the ages of 16 and 74 used the internet at home. In addition to this information, 42.5% of the individuals using internet between the ages of 16 and 74 used internet at workplace, 37.7% of them used internet at relatives' or friends' houses, 29.2% of them used internet at places such as shopping center and airport with wireless internet connection. The percentage of internet use at internet cafes was figured out as 10.6%. Furthermore, 74.4% of the individuals using internet in the first three months of 2016 used mobile phone or smart phone in order to connect to internet wirelessly outside their home and workplace and 28.9% of them used portable computers (laptop, netbook, tablet etc.). These percentages were 58% and 28.5% in the same period in 2014 respectively. According to another data, the percentage of ordering and buying property or services for personal use

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through internet was 33.1. The percentage of individuals shopping through internet was 30.8 in the previous year [21]. As it can be seen, portable device use for internet outside the home or workplace has increased in 2016 when compared to 2015. Nevertheless, percentage of shopping through internet has also increased when compared to the year 2014.

New internet applications have begun to emerge enabling users to interact with other users and network [7] and “readable and writeable web” in which user-based content is emphasized and content sharing is applied [9]. These applications are named as social network [5], [17], [18], social communication network [8], social networking website [14], [2], online communities [6] in the literature and all these web 2.0 applications are generally defined as “social media” [11], [10], [16], [23]. Features such as cooperation, personalization, adding user-supported content, metadata and user-friendly interface especially enrich user experience and make these social environments more attractive. Social network use in education as in daily life is also a frequently discussed issue today [3], [17]. In line with this situation, it is also stated that familiarity and inclination towards the internet among young individuals require to keep education system current and benefit from the opportunities which technology provides [13]. According to Thompson, Edd, Ches (2012), the most important reason for the preference of social network among young individuals is the expectation of making friends apart from educational purposes. So thus, participation to social networking websites has gained acceleration in the last years among young individuals as internet use [19]. Social network especially affects young individuals to a great extent. Individuals who experience social adjustment problems use online communication more frequently and do not prefer face-to-face interaction. Social skills problems are also shown as the reasons for excessive and unconscious use of the internet. The most important reason for the preference of online communication among young individuals is the expectation of making friends [21]. Communication with peers, gaining respect in the group and sharing experiences are shown as the other reasons [20].

Another technology which young individuals frequently use apart from internet social network is mobile devices. Individuals can begin learning process independently from time and place through mobile technologies and intervene to the process at any time. They can benefit from mobile technologies at any time and place through using the internet with GPRS/3G/4G technologies. Typical features of mobile devices such as accessibility, personalization and portability offer a great potential in order to

achieve out-of-class learning, exercise and application studies and bring many advantages as well [1]. According to the research conducted by [4] related with the use of mobile devices among new generation in Turkey, the results showed that the most important usage purposes of mobile devices were communication and interaction-focused with a value of 81.3%; entertainment-focused with a value of 11.3%; internet search/research-focused with a value of 6.2% and work-focused with a value of 1.1%. In the same research, monthly spending table for mobile devices based on age was constituted and the 21-40 age group was the first group among the other groups with a percentage of 26.5. This results show us that mobile device uses are more effective in young and middle-age group.

Furthermore, Gikas and Grant (2013) examined the perceptions of higher education students about mobile phone, smart phone and social media [12]. They conducted focus-group interviews with higher education students in line with this aim. After the interviews, subject headings such as advantages of mobile devices in terms of student learning, limitations, communication between social media and web 2.0 tools, their supports for collaborative learning, changes in terms of learner behaviors and content-student interaction were covered. Consequently, higher education students indicated that they can easily access lecture contents through web 2.0 and social media tools. Besides, they stated that they can participate in out-of-class activities through written messages without participating in any lecture or course. It was revealed that students continue to participate in education and teaching activities through mobile devices after leaving the classroom based on this statement. These opinions constitute an evidence for the fact that mobile devices are used for both formal and informal education. Students also emphasized that they learn through collaborative learning in social media environments and peer-mediated learning. Nevertheless, it was also revealed that social media environments support student-content interactions. Frequency of internet, social network and mobile device use among young individuals especially university students and the effect of these frequencies on internet addiction should be examined based on all of these above mentioned information.

2. Method

Survey method which is one of the quantitative research methods was used in this study. A survey was developed by the researchers and administered including frequency of internet use based on week, duration of internet connection, in which environments the students connect to the internet,

frequency of benefitting from mobile devices and social network and leisure activities of the students. Data of the study were analysed with SPSS 24 program and results obtained from this analysis were interpreted.

Participants

Participants included a total number of 363 university students in which 255 were female and 108 were male studying at Near East University Ataturk Education Faculty from the departments of Computer Education and Information Technologies, Pre-school Teaching, Guidance and Psychological Counselling, Classroom Teaching and Turkish Language Teaching during the academic year of fall 2016-2017.

Findings

Demographic Characteristics of the Participants

When distribution based on gender is examined, it is seen that 70.2% (255 subjects) of the participants were female and 29.5% (108 subjects) of them were male. According to the distribution based on ages, it is seen that 39.1% (142 subjects) of the participants were between the ages of 18-20; 48,8% (177 subjects) of them were between the ages of 20-24; 2.5% (35 subjects) of them were between the ages of 24-26 and 2.5% (9 subjects) of them were in the 27 and above group.

Distribution of the Participants Based on Department and Years

When distribution based on the departments is examined, it was revealed that 16.8% (61 subjects) of the participants were from the department of Computer Education and Information Technologies; 28.9% (105 subjects) of them were from the department of Turkish Language Teaching; 38.6% (140 subjects) of them were from the department of Guidance and Psychological Counselling; 10.2% (37 subjects) were from the department of Pre-school Teaching and 5.5% (20 subjects) of them were from the department of Classroom Teaching.

According to the distribution based on frequency of internet use, it was figured out that 55.4% of the students use the internet every day; 8.0% of them use the internet one day per week; 21.2% of the use the internet 2 or 3 days per week and 15.4% of them use the internet 4 or 6 six days per week. According to the table, it is seen that weekly frequency of internet use among students is mostly every day.

Distribution based on average duration of internet connection showed that 16,0% of the students stay connected to the internet between 0 and 1 hours; 40%

of them stay connected to the internet between 1 and 2 hours; 27.8% of them stay connected to the internet between 3 and 4 hours and 15.4% of them stay connected to the internet 5 hours and above. It is seen that students mostly stay connected to the internet between 1 and 2 hours. Another important point in the table that should be considered is that the percentage of the students who stay connected to the internet 5 hours and above is also really high.

According to the distribution based on the environment that students connect to the internet; 43.5% of the students indicated that they connect to the internet at home with a connection belonging to their computers; 27.5% of them connect to the internet at any place with their computers through wireless connection; 4.4% of them connect to the internet at internet cafes; 19.3% of them connect to the internet at universities; 1.7% connect through their friends' connection and 3.6% of them connect with mobile devices. It is seen that "a connection belongs to my computer" statement is the most frequent respond among the students. Household Information Technologies Use Research 2016 [22] report also supports this finding. Percentage of internet connection among students which does not belong to them (friend, internet cafe) is extremely low.

According to the distribution based on leisure activities, 31.4% of the students stated that they spend time on the internet; 20.9% of them stated that they spend time with their families; 19% of the students spend time with their friends; 12.7% of them are interested in sports activities and 12.4% of them indicated that they read books. It is seen that students mostly spend their time on the internet. This is pursued by spending time with family, friends and sports activities, reading books and playing games. Another considerable point is that the percentage of students indicating that they read books is low.

Distribution based on frequency of mobile devices use revealed that 8.0% of the students never use mobile devices; 27.3% of them sometimes use them; 22.0% of them often use and 42.4% of them always use mobile devices. As it can be seen, students mostly indicated that they always use mobile devices. Another important point is that "never" statement has the lowest frequency.

According to the distribution based on frequency of social network use, it is seen that 5.8% of the students stated that they never use social network, 18.5% of them use them sometimes, 26.7% of them often use and 49% of them always use social network. Similar to the findings related to the mobile devices, students mostly indicated that they always use social networks. Students indicating that they never use social network remained as low.

Table 1. Students connect to the internet while the relationship between the frequency of internet use – Chi-square (X^2) test

What is your frequency of usage of the Internet?	How long do you connect to the Internet?				Chi-square (X^2)	Asymp. Sig (p)
	0-1 hour	1-2 hours	3-4 hours	Total		
Everyday	33	66	102	201	53.298 ^a	.000
Once a week	10	18	1	29	58.728	.000
2-3 days a week	10	49	18	77	p < 0.05	
4-6 days a week	5	15	36	56		
Total	58	148	157	363		

Table 2. The relationship between the average of the internet's connection frequency with the environments where the connection takes place - Chi-square (X^2) test

How frequently do you connect to internet?	Which environments do you connect to the internet?							Chi-square (X^2)	Asymp. Sig (p)
	A connection with my computer	A connection with my computer any home	internet cafe	University	A friend's connection	Other	Total		
0-1 hour	23	19	1	10	0	5	58	29.246 ^a	.015
1-2 hour	19	35	12	30	5	2	100	31.001	.009
3-4 hour	46	24	1	25	1	4	157	p < .05	
5 hours and more	25	22	2	5	0	2	56		
Total	158	100	16	70	6	13	363		

According to Table 1., the Chi-Square test showed a significant difference between the students connected to Internet while the frequency of Internet use ($p < .05$). Comparing the connection of how much time using internet with the frequency of internet usage, tem frequency of benefit ascertained as “everyday” and “3-4” of time. When the internet’s frequency of occurrence increases, the connection time will increase too. This results reveal the importance of internet in the student’s life.

The Chi-Square test with frequency of use of the internet - the internet in an environment which seems to be a significant difference between the connected

($p < .05$). The furthest connection time and place is ascertained as a connection which belongs to a computer within “home” and “3 – 4 time” the lowest connection time and place is ascertained as “internet cafe” and “0 – 1” period of time. It began to decline in demand for internet cafes. This situation, in environments such as young people can reduce the likelihood of getting internet cafe predict bad friends. On the other hand, the frequency using the internet has been one of at least 0-1 hour demand options. This situation is expected to be an increased risk of internet addiction may occur among young people (Table 2.).

Table 3. The relationship between the frequency of using mobile devices with the environments where the connection takes place - Chi-square (X^2) test

Frequency of using mobile devices	Which environments do you connect to the internet?							Chi-square (X^2)	Asymp. Sig (p)
	A connection with my computer	A connection with my computer any home	internet cafe	University	A friend's connection	Other	Total		
Never	22	1	0	4	0	2	29	30.344 ^a	.011
Sometimes	38	5	7	20	3	7	100	33.729	.004
Usually	32	22	4	20	1	1	80		p < .05
Always	66	52	5	26	2	3	154		
Total	158	100	16	70	6	13	363		

According to Table 3., to the Chi-square test in the environments in which mobile devices that connect to the frequency of use of Internet appears to be a significant difference ($p < .05$). The environments in which it is connected to the Internet, the frequency of use of mobile devices "with a link to computer at home and "always" option is put forward in benefit of that.

According to Table 4., to the Chi-Square test between the social networks that connect to environments in which the frequency of use of Internet seems to be a significant difference ($p > .05$). The results of social networks (Facebook, Twitter, Blog, MySpace, MyNet, Netlog etc.) has acquired an important place in people's lives and revealed that they use the space without notice.

3. Conclusion and Discussion

In this study, frequency of internet, social network and mobile devices use among teacher candidates were examined. Besides, university students stated that they connect to the internet during their leisure times.

According to a series of statistical analysis; it was revealed that frequency of internet use was every day in a week, duration of internet connection was 1-2 hours every day, students frequently stay connected to the internet at home with a computer and the frequency of mobile devices and social network use was every time.

Table 4: The relationship between the frequency of using social network with the environments where the connection takes place – Chi-square (X^2) test.

Frequency of using social network	Which environments do you connect to the internet?							Chi-square (x^2)	Asymp. Sig (p)
	A connection with my computer	A connection with my computer any home	internet cafe	University	A friends connection	Other	Total		
Never	8	5	2	4	0	2	21	24.064 ^a	,240
Sometimes	28	17	3	11	4	3	66	20.944	,400
Usually	45	20	7	22	1	3	98	p > 0.05	
Always	77	58	4	33	1	5	178		
Total	158	100	16	70	6	13	363		

When frequency of internet use and duration of connection to the internet is compared, students mostly responded as “every day” and “3-4 hours”. When frequency of internet use increases, duration of connection to the internet also increases. This results show the importance of the internet in the lives of teacher candidates. Furthermore, a significant difference was found between frequency of internet use and the environments in which students stay connected to the internet. It was also figured out that students indicated that they connect to the internet with “a connection belongs to their computer at home” during “3-4 hours”.

Household Information Technologies Use Research 2016 report [22] also supports this finding. “Internet cafe” was found as the least environment that students connect to internet and “0-1” hours has the least frequency among the responses. Inclination towards internet cafes has seriously begun to reduce. This situation can predict that young individuals’ possibility of making bad friends in environments such as internet cafe might decrease. In addition, “0-1 hours” has the least frequency among the responses. This might also predict that the risk of internet addiction can increase. There is also a significant difference between frequency of mobile devices use and the environments that students stay connected to the internet. The results on the environments that students stay connected to the internet and frequency of mobile devices use revealed that students connect to the internet at home with computer and they always

use mobile devices. According to the results, there was no significant difference between frequency of social network use and the environments that students stay connected to the internet. This result revealed that social network (Facebook, Twitter, Blog, Myspace, Mynet, Netlog...) has an important place in individuals’ lives and they use social network anywhere.

Recommendations

The rich content and many innovations of internet network especially attracted the attention of young population and as a result of this situation, frequency of internet use has dramatically increased. Nevertheless, excessive use of internet use brings many mental and physical problems as well. The present study showed that students frequently spend their time on internet during their leisure times and the number of young individuals who read a book during leisure times is really low. It was also revealed that social network has important effect on the lives of young individuals and they use social network anywhere (home, internet cafe, friends’ connection, etc.). These results also support the literature. It is predicted that providing education for young individuals related with negative mental and physical disorders caused by excessive use of internet and loneliness, depression, low self-esteem caused by excessive amount of time spent on social network might resolve these issues through increasing awareness.

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