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**The Views of Nursing Students about the
Purposes of Internet Use and the Effect of
Technology on Educational Activities**

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The Views of Nursing Students about the Purposes of Internet Use and the Effect of Technology on Educational Activities

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Abstract

The aim of study is to examine the opinions of the students, who received nursing education in the university, about the use of internet and the effect of technology on educational activities. This is an analytical cross-sectional study that was carried out with 145 students. The data were collected by a questionnaire and a scale determining the purposes of internet use. Students stated that opinions about the use of technology in the lessons; increased creative thinking skills (57.9%), enriched the course content (50.3%), increased the quality of education (48.3%), the use of video was effective in learning (48.3%), and increased motivation (43.4%). Subscales of the Internet use purposes scale mean scores; social escape motivation 3.08 ± 0.27 , information motivation 3.85 ± 0.20 , leisure time activities 3.90 ± 0.24 , economic benefit 3.67 ± 0.20 , social interaction 3.93 ± 0.14 and entertainment size was determined as 3.82 ± 0.4 . It was found that the students who participated in the study thought that the use of technology was effective in their learning activities, increased their motivation and developed their creative thinking skills. It was determined that students mostly used the internet for social interaction, free time activities and in order to obtain information.

Keywords: Internet, Nursing Education, Nursing Students, Technology.

Acknowledgments: Our thanks to nursing faculty students.

Introduction

Today, the development of technology has caused changes and developments in many areas of the society. These changes in technology play a major role in accessing information in the field of education and diversifying teaching activities. Easy access to the use of computers and the Internet from home, school, work and other places has led to the removal of borders in accessing and obtaining information. These developments have been effective in developing structural and functional activities in all educational institutions. It has become imperative to innovate especially in the design of teaching materials and learning environments. Internet makes important contributions in communicating with the world, following the developments in the world, accessing the information needed and meeting the learning needs of individuals (Karahan and Izci 2009).

Literature Review

According to a report published by the Turkish Statistical Institute (2019) the group that uses the internet in our country the most, is that of 25–34 years and is followed by that of 16–24 years old. If we look for which purpose the internet is used for the most, messaging takes the first place with 93.9%. Then comes the use of audio or video conversations and social media over the internet with 82.7%. The lowest usage rate is that of presenting an opinion on any subject or participating in voting (TUİK 2019).

According to the World Internet Usage Statistics (2019), it is reported that 58% of the world population is internet users, 48% is social media users and that the number of mobile social media users has reached 3.66 billion. When the monthly activities of internet users are examined; 91% of users watches online videos on the Internet, 51% spends time with blog broadcasts, 69% listens to music over internet services, and 47% is seen to be online radio listeners. As it can be seen from the statistics, internet usage is very common among university students. According to the results of the study done by Dursun (2004), students use the Internet for e-mails (18.3%) and for reading news, watching the media (16.68%); it has also been determined that they use it in order to make money on the internet (65%).

Simulations used in nursing education, environments created with virtual reality, three-dimensional visuals are among the contributions of technology. Many innovations have enriched the education life in the university, such as showing videos about the subject in most of the lessons, following the lesson with the students' own computers in the classroom, making internet connections during the lesson, sharing the lecture notes on the internet, and following the books and lessons from the students' phones.

Today, university students in the z generation are young people who are conscious about the use of technology, have high awareness and do not know the limit in accessing information.

Even if these students have a lot of opportunities, the purposes of internet use and how much they benefit from technology in their educational lives are discussed. In this study it was aimed to examine the opinions of nursing students about the internet usage purposes and the effect of technology on educational activities. The research questions are the following:

1. What are the Internet usage purposes of nursing students?
2. What are the opinions of nursing students about the effect of technology on educational activities?

Methodology

The research is an analytical-cross-sectional research. The research was carried out in the Faculty of Nursing of Aydın Adnan Menderes University in the academic year of 2019–2020. In the study, the calculation of the sample volume was done by Balcı et al. (2013) based on a study, in which university students examined the patterns of internet usage.

The minimum number of individuals to be included in the sample of this research was calculated with the G * Power test. As a result of this test, the sample size was found to be 124 with the assumption that the effect size: 0.30, $\alpha = 0.05$, power: 0.80 and t test will be performed with G * Power 3.1.9.2. One hundred forty-five students were enrolled in the study by considering the probable case losses with the improbable sampling method (Karasar 1999).

Data Collection Tools

Questionnaire was used to collect the research data. The questionnaire includes questions that question students' demographic features, questions about internet use (monthly internet usage amount, duration of internet use, internet use for studying), technological opportunities they use at school and the impact of technology use on learning activities (23 questions).

In order to determine the internet usage purposes of the students, the scale related to the internet usage purposes developed by Balcı et al. (2013) was used. Cronbach's Alpha coefficient of the scale was determined as 0.891. This scale consists of 46 questions and six sub-dimensions titled "social escape motivation", "information motivation", "leisure time motivation", "economic benefit motivation", "social interaction and chat motivation" and "entertainment motivation". The scale is a five-point Likert type (1- I disagree, 2- Disagree, 3- Undecided, 4- Agree, 5- Agree completely) scale. Permission was obtained from Şükrü Balcı by mail for the use of the scale. Number, percentage and average tests were used to evaluate the data.

Ethical Situation

Approval was obtained from Aydın Adnan Menderes University, Nursing Faculty, Non-Interventional Research Ethics Committee, and a research permit was obtained from the Nursing Faculty of Aydın Adnan Menderes University. The aim of the research was explained to the participants by the researcher and a verbal consent was also obtained.

Results

It was determined that the average age of the students participating in the study was 19.69 ± 1.24 and 73.1% was females and 26.9% was males. It was determined that 61.4% of the students graduated from Anatolian High School, 68.3% lived in the dormitory and 66.2% of the income level and expense level was equal.

Table 1 shows the students' internet usage features. Accordingly, it was determined that 36.6% of the students spends 3–4 hours a day on the internet and 64.8% uses less than 20% of this time to study. It has been determined that 83.4% of the students uses 8 GB or more Internet monthly and 82.0% of them actively follows the Internet by phone.

Table 1. *Students' Internet Usage Features (n = 145)*

	n	%
Time / days on the Internet		
1–2 hours	18	12.4
3–4 hours	53	36.6
4–5 hours	49	33.8
6 hours or more	25	17.2
How much time to study on the Internet		
Never	16	11.0
20% or less	94	64.8
Half the time	31	21.4
More than half	4	2.8
Monthly Internet usage		
2GB	11	7.6
4 GB	13	9.0
8 GB and above	121	83.4
Internet usage		
Computer	26	17.9
Telephone	119	82.0

60.7% of the students stated that there are not enough technological opportunities for educational activities in their schools. The students are able to use the technological opportunities they use in school; it was reported that there are sufficient resources in the library (49.7%), a simulation laboratory (20%), a computer laboratory (13.1%), access to educational materials that can be

downloaded to the phone (10.3%) and use of documents with three or four dimensional images (22.8%).

In addition, 72.4% of the instructors stated that they benefited from the technology in the lessons and 92.4% of them stated that the use of technology is important for conducting research during the preparation phase. 51.8% of the students reported that they watched videos on the internet to reinforce nursing practices, 62.7% of them downloaded and read the topics on their phones and 73.8% of them watched three-dimensional videos for courses, such as anatomy.

Students' views on the effect of technology usage on learning levels in the lessons were examined. According to this, the students reported that the use of technology enriched the course content (82.7%), increased the quality of education (73.8%) and increased motivation (68.9%) (Table 2).

Table 2. *Students' Views on the Effect of Technology Usage on Learning Activities in Lessons (n = 145)*

Students' Views	Yes		No		Undecided	
	n	%	n	%	n	%
Technology is effective in developing my creative thinking skills.	113	77.9	10	6.9	22	15.2
It is effective in teaching technology writing skills.	78	53.8	36	24.9	31	21.3
Technology is effective in teaching reading skills.	93	64.1	22	15.2	30	20.7
Technology is effective in teaching listening skills.	100	69.0	17	11.7	28	19.3
Technology is effective in teaching critical thinking skills.	99	68.3	20	13.8	26	17.9
I think more independently thanks to the technology.	64	44.2	23	15.8	58	40.0
I think technology will increase my success.	98	67.6	15	10.4	32	22.0
Technology ensures active participation in classes.	85	58.6	27	18.6	33	22.8
It increases the quality of education.	107	73.8	12	8.3	26	17.9
It increases students' motivation.	100	68.9	24	15.2	23	15.9
It is effective in attending the lesson.	81	55.9	35	24.1	29	20.0
It enriches the course content.	120	82.7	9	6.3	16	11.0
It makes theoretical issues more permanent.	111	76.5	11	7.6	23	15.9
The use of video in lessons is effective in my learning.	119	82.0	15	10.4	11	7.6

The scale was used to determine the students' purposes of using the Internet. The sub-dimensions of the scale used to determine the aims of the students to use the Internet mean scores; social escape motivation is 3.08 ± 0.27 , information motivation is 3.85 ± 0.20 , leisure time is 3.90 ± 0.24 , economic benefit is 3.67 ± 0.20 , social interaction is 3.93 ± 0.14 and entertainment dimension is 3.82 ± 0.40 . In the social escape motivation sub-dimension of

students' Internet use goals, they stated that it was because it helped them to clear their heads, that they did not have a better job to do, that they linger on the Internet, that it allows them to get away from their problems for a moment, and that opens doors to other worlds.

In the motivation to be informed, to have an idea about a subject, term or learn to record the grades received in courses, courses to help source that events occurring in the world and Turkey is determined to use the internet to find out why immediately. In the motivation to spend their free time, they stated that there are alternative options to spend time when bored and to find interesting things; it is enjoyable to use the internet. In the economic benefit motivation, they stated that they use the internet in order to obtain useful information about the products and services, because they like the convenience of shopping on the internet, and because they can find products on discount. Internet usage goals in social interaction motivation; it has been determined that it is for giving opinions and advice to others because they can share information with other people, and because they communicate with the people they knows. 87.6% of the students stated that they used the internet to listen to music and 62.8% of them used it to play games.

Discussion

In our study, it was determined that students' daily internet usage time was 3–4 hours. 87.6% of the students stated that they used the internet to listen to music and 62.8% of them used it to play games. In a study on university students' internet usage, the average daily internet usage time of students is 167.5 minutes and the most social networking sites and information news sites are followed, as well as watching movies and videos, watching game sites, online shopping and bank transactions (Balçı et al. 2013). According to the results of the study conducted by Dinçer et al. (2014), it was also determined that 33.3% of the students used the internet for research lesson topics, 26.6% used the internet for watching movies, music and videos, and 13% used the internet for social communication. In a study conducted with the participation of 11,956 adolescents in Europe, the most frequent online activities of adolescents were found to be watching videos, chat rooms and social media (Durkee et al. 2012).

In our study, it was observed that the students used internet for research (38.46%) and homework (28.61%). In a study conducted by Küçük (2017) with the students of nursing and midwifery, the purposes of using the Internet were social media (78.3%), communication (76.6%), education (73.3%), shopping (36.6%), banking (18.1%); games have been reported as entertainment (41.8%) and news tracking (55.9%) (Küçük 2017). According to the results of the study conducted by Dinçer et al. (2014), university students also determined that 33.3% of the students used the Internet to research lesson topics, 26.6% used the internet for watching movies, music and videos, and 13% used the internet for social communication. Yavuz and Coşkun (2008) also obtained similar

results in their studies. It has been determined that 80% of the students are the means of delivering information to the Internet in the shortest way, 60% of the technological tools motivate the student, and 60% agrees that they should be used in the lecture. In addition, 57% of students reported that technology benefited in terms of efficient working and learning, and 50% reported that technology could be better understood with the use of technology.

The students reported that the use of technology enriched the course content (82.7%), increased the quality of education (73.8%) and increased motivation (68.9%). Based on the use of technology in the lessons, positive ideas such as lessons become more enjoyable, visual materials make it easier to understand and save time (Yılmaz et al. 2010). In the study of Okay and Aydoğan (2010), it has been determined that the students mostly use the homework and course research in the consumption of the Internet for educational purposes (Okay and Aydoğan 2010).

In our study, students' mean of using internet was determined as their average score, social escape motivation 3.08 ± 0.27 , information motivation 3.85 ± 0.20 , leisure time 3.90 ± 0.24 , economic benefit 3.67 ± 0.20 , social interaction 3.93 ± 0.14 and entertainment dimension 3.82 ± 0.40 . According to these results, it is seen that students use the internet mostly for social interaction. Similar results were obtained in many studies. In a similar study conducted by university students, it was determined that the aims of university students to use the Internet are chat/interaction, daily tension, seeking information, seeking friendship/innovation, fantasy/sexuality, spending time, playing/entertainment, seeking escape / freedom, loading / downloading (Işık 2007). When asked about the most important purpose of using the Internet in another study, the first three aims were social media, watching videos and wandering aimlessly (Durmuş et al. 2018). In our study, information motivation comes second. Similarly, in their study, Balcı et al. (2013) determined that "the Internet meets the need for news and information" is the primary reason for using the internet. Nowadays, Internet provides important resources to follow news. Students frequently use the Internet to keep up with the events and news that are developing in the world and in their country.

Conclusions

It was found that the students who participated in the study thought that the use of technology was effective in their learning activities, increased their motivation and developed their creative thinking skills. It was determined that students mostly used the internet for social interaction, free time activities and in order to obtain information.

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