



INTERNET AND SOCIAL MEDIA USAGE OF SECONDARY SCHOOL STUDENTS IN RURAL AREAS

Assist. Prof. Dr. H. Nur GORKEMLI

Selcuk University, Faculty of Communication,
Department of Public Relations and Publicity
ngorkemli@selcuk.edu.tr

Abstract

With the developments in the field of technology, significant changes occurred in means of communication. Rapid extension of internet access across the world made it possible for people to communicate each other without time and space limitations. Especially the innovative Web 2.0 technologies, which evolved in the beginning of millennium, made people possible to create and share their own contents. Today, people in all age groups across the world increasingly use internet and social media for several purposes and this development opened the door for new research activities to scholars. Various studies showed that with some geographical and demographical differences, it could be said that internet usage was increasing rapidly in almost everywhere in the world. Based on the argument that internet and social media usage could vary across people with different demographical features, this study was conducted to understand social media and internet usage of secondary school students from three different schools located in rural areas of the city of Konya. Survey was applied to secondary school students whose ages differed from 10 to 15. The schools were in villages, located 37–87 kilometers far from Konya's city center. Data collected from students were analyzed with SPSS program. Students' access to the internet, duration of their internet and social media usage, their social media preferences were interpreted in terms of demographical features and the educational background of the family of the students. No statistically significant relations were found between sex and internet usage, and between family's education level and internet usage; however, statistically significant relations were found between sex and purpose of internet usage.

Key words: internet, social media, social network sites, rural area, secondary school students.

Introduction

Thanks to Web 2.0 technology, which enables contents to be shared by masses, low-cost, effective and interactive communication became easier. With this new technology, people met with blogs, wikis, social networks and lots of new applications, which are so called social media. These applications made effective, easy and interactive communication without time and place constraints.

Although the terms social media and social networks are used interchangeably, there are some differences. Social media functions as a communication tool for transferring contents (Morehead et al, 2013). Social networks are one of the common usage areas of social media and with this networks people of the same interest and/or experience contact each other

with more personal contents, and this network grows as new people met in these environment (socialmediatoday.com). Boyd and Ellison (2004:211) described Social Network Sites (SNS) as “web based services that allow individuals to construct a public or semipublic profile within a bounded system, articulate a list of others with whom they share a connection and view and traverse their list of connections and those made by others within the system”. Communication between masses became faster, easier, cheaper and more effective via social media tools such as blogs, tweets, wikis and social networks.

People use SNS for various purposes. Study of Brandzaeg and Jan (2009: 146-149) showed that main motivations of using SNSs were as follows: establishing new relations, contacting with friends, socializing, getting information, debating, sending free SMS, time-killing, sharing/consuming content, for fun, profile surfing, contacting with family, etc. In their study Brandzaeg and Jan (2009: 150) found it interesting that, self-presentation was not mentioned as a motivation factor for using SNSs although using technology for personal branding and narcissism could be an important factor in using SNSs.

Internet and Social Media Use in the World

Various studies showed that there was rapid increase in social media usage as it was seen in internet usage in all over the world. According to 2015 data, internet usage was 46,4% in the world, and the rate of increase was 832,5% in last five years (www.internetworldstats.com). Internet usage rates showed some differences across the world, for instance North America (87,9%), Europe (73,5%) and Australia (73,2%) were the regions where internet was widely used. South America and Caribbean (55,9%), Middle East (52,2%), Asia (40,2%) and Africa (28,6%) followed developed regions respectively (www.internetworldstats.com). This rapid increase was also seen in social media usage. Percentage of social media usage reached to 2,2 billion people (covering almost 30% of world population) with an increase of 176 million people in one year. Moreover people using social media applications in their mobile device reached to 1,9 million (www.socialmediatoday.com). Facebook users were 500 thousand in 2010 (Anthenuis et al, 2013: 426), but reached to more than 500 thousand people with 6 new profile additions in every second, moreover, it was stated that 2 million smart phones were being sold every day (www.socialmediatoday.com). Besides Facebook, there were other popular social networks like Twitter, Instagram and LinkedIn, where number of subscribers increased every day. Twitter had approximately 300 million users, 88% of whom reached this application via mobile devices. Number of tweets exceeded 500 million per day and Instagram reached 300 million users with

daily more than 70 million content sharing. Another application was LinkedIn, which was used for professional purposes, had nearly 347 million users (www.jeffbullas.com).

Parallel to the developments in the world, increases in internet and social media use were very dramatic in Turkey. According to Turkish Statistics Institution's data, 55,9% of people between ages 16 and 74 was using internet and 69,5% of households had internet access (ww.tuik.gov.tr). It was reported that in last ten years, number of internet usage was increased 1750% (sgb.kulturturizm.gov.tr). June 2015 data showed that in Turkey, active internet users were 37,7 million, active social media accounts were 32 million, average hours spent on internet were more than 4,5 hours a day, average hours spent on mobile internet were very close to 3 hours a day and average time spent on social media was almost 3 hours a day, while total hours spent on TV were around 2 hours a day (<http://wearesocial.com>).

Active social platforms and their usage percentages are listed in the Table1. As it is seen in the table below, Facebook, Whatsapp and Twitter are the most popular platforms with 26%, 23% and 21% usage rates, respectively (<http://wearesocial.com>).

Table 1. Active social platforms and their usage rates

Social Platform	Usage (%)
Facebook (*)	26
Whatsapp (**)	23
Facebook Messenger (**)	21
Twitter (*)	17
Google+ (*)	14
Skype (*)	13
Instagram (*)	12
LinkedIn (*)	8
Pinterest (*)	7
Viber (**)	6

(*) Social networks

(**) Message applications

Korda and Itany (2013:18) gathered the results of different studies conducted in United States in different period of times between 2006 and 2009 and classified the data according to generations. Studies showed that 90% of Y generation (18-29 age group) had mobile phones and they used it mostly for messaging, sending pictures and using internet. 57% of X generation (30-49 age group) watched online videos, 37% of mobile phone users messaged texts, 28,9 % downloaded mobile applications and 44% played computer and video games. Baby boomer generation, which covered the ages between 50 and 65 watched online videos (46%), sent text messages (13%), downloaded applications (12.1%) and played computer and video games (25%). Elderly people over 65 age watched online videos (39%), sent text messages (8%) and downloaded mobile applications (4%). This study showed that

younger generations more intensely use internet according to several independent researchers' studies, which were conducted between the years 2006-2011 (Korda and Itany, 2013: 18).

Similar to the internet usage results, survey of Pew Research Center's Internet and American Life Project showed that young adults, who were between ages 18 and 29, used social media more than other age groups with a rate of 67% among all internet users. Another result of the study revealed that social network usage among young adults was in high rate (83%) (Duggan and Brenner, 2013:1-2).

Studies revealed that internet and SNS usage rate of teenagers was really high and most of these studies underlined the fact that such a high rate may cause some problems for those who were accepted as internet addicted people. Pew Research Center's study showed that 13-17 years old teenagers' internet usage was remarkably high as 92%, moreover, 24% of teenagers went online constantly. Facebook and Instagram were the most popular SNSs among teenagers, and teenagers from less wealthier families were likely to use Facebook more frequently (49%) when compared with teens from wealthier families (37%) (Lenhart, 2015). In Bayraktar and Gun's study (2007:191), 686 students between 12-17 years old in Northern Cyprus were examined and it was found that main motivations for internet use were entertainment and communication. In addition to that mainly violence games were preferred and 1.1% of students could be determined as pathological internet users. Cao and Su (2007:275) surveyed 2620 high school students and indicated that 2.4% of the students were internet addicted, who possessed different psychological features when compared to those using internet less frequently. Kim et al (2006:185) examined 1573 high school students in South Korea and showed that 1,6% of the subjects were diagnosed as internet addict, 38% of the subjects were seen as possible internet addicts. In a similar study Lin and Tsai (2002:411) in Taiwan surveyed 753 high school students in Taiwan and demonstrated that main motivation of students' internet usage is making friends and 88 of the subjects (%11,7) were internet dependent adolescents, whose daily routines, school performance and parental relations were significantly more negative compared to non-dependent students.

There are some studies in the literature about internet and SNS usage in urban and rural areas. Duggan and Brenner (2013: 1-2) explored social network sites usage in different residential areas and according to their results; people in urban and suburban areas used social network sites (SNS) more than people in rural areas. In urban and suburban areas rates were 70% and 67% respectively, whereas this rate was 61% in rural areas. In a study executed by Gilbert et al (2008:1610-1611), more than 3000 rural and urban social media users were compared and it was found that rural people articulated fewer friends and these friends lived

closer to their home. Those friends and people in rural areas communicated with friends living closer to their home. Rural woman occupied larger portion of rural users when compared with the urban woman users' percentage in urban users. Hoorik and Mweetwa, (2008:1) conducted a study and inferred that people used internet in a rural part of Zambia for communicating, searching information and shopping purposes as seen in Western countries and since there were lack of facilities like telephone lines, libraries, newspapers and roads in good condition, internet became more important in such areas.

Internet and Social Media Usage of Teenagers in Rural Secondary Schools in the City of Konya

Aim, Scope and Methodology

By taking into consideration all the studies showing that internet and SNS usage is increasing rapidly, especially in teenagers and there are some differences of these usage in urban and rural areas, in this study we aimed at taking a picture of internet and SNS usage of three secondary school students in rural areas of Konya in Turkey. Study was conducted in three secondary schools located in three different villages (Hotamis, Alanozu and Basarakavak), which were 37-87 kilometers far from Konya city center. Questionnaires were distributed to the teachers and they were requested to get the students' answers at the beginning of their lecture. All the teachers in Alanozu and Basarakavak agreed to collect the questionnaires from all of the students in the school; however, only one teacher from Hotamis agreed to collect the questionnaire from his students, therefore the percentage of participants were lower in Hotamis secondary school. Total number of students in all three schools was 354 and students in our sample were 193. The answers were evaluated by using SPSS program.

Findings

Three secondary schools were located in rural part of Konya. Basarakavak secondary school, which is approximately 37 kilometers far from Konya's city center, have 87 students and 83 of them agreed to fill the form. Secondary school in Hotamis, which is 85 kilometers away from Konya center, was the biggest school in our sample with its 202 students and only 49 of them filled in the questionnaire. Alanozu secondary school, which is 87 kilometers from Konya, have 65 students and 61 of them filled the form. Students' ages were between 10 and 15, and average age was calculated as 12,7. Number of girls in the study was 104, which formed 53% of the participants and number of boys were 88, which was 45,6% of the participants. 51% of students' household head were graduates of primary school and 34% of

them were secondary school graduates. High school and university graduates were low as 7,8% and 3,1% respectively. 2,6% of household heads did not even attend school. Table 2 summarizes the demographical distribution of the subjects.

Table 2. Demographical distribution of participants

	Freq.	Percent
Basarakavak	83	43,0
Hotamis	49	25,4
Alanozu	61	31,6
Total	193	100,0
	Min.	Max.
Age	10,00	15,00
		Mean
Age		12,7760
Sex	Freq.	Percent
Girl	104	53,9
Boys	88	45,6
Missing	1	0,5
Total	193	100,0
Education of the Household Head	Frequency	Percent
Did Not Attend School	5	2,6
Primary School	100	51,8
Secondary School	66	34,2
High School	15	7,8
University	6	3,1
Missing	1	0,5
Total	192	100,0

171 of 193 participants (88,6%) stated that they used internet. Subjects were asked to mark devices to access internet and they were allowed to choose more than device if they used so. The most popular device to access internet was smart phones since 67,3% of internet users accessed internet through this device. Personal computers and tablets followed smart phones with rates of 56,1% and 39%, respectively. Another question in the questionnaire asked where the students reached internet. Subjects were allowed to mark more than one answer to this question if they accessed internet from more than one place. 65,5% of the participants stated that they reached internet from their homes and 39,8% used internet at school and 8,2% of the subjects marked that they used internet at internet cafes or several workplaces. Time spent per week on internet showed great variations. Students' time spent on internet varied between 1 to 45 hours and the average time was calculated as 7 hours per week. Number of students using internet 35 hours and more per week was 4. These 4 students could be classified as heavier internet users when compared to other students. Their percentage was 2,3%. Table 3 summarizes below the internet usage data of the participants.

Table 3. Internet usage

Do You Use Internet?	Frequency	Percent		
Yes	171	88,6		
No	22	11,4		
Total	193	100,0		
Devices for Accessing Internet	Frequency	Percent		
Smart Phones	115	67,3		
PC	96	56,1		
Tablets	67	39,2		
Total	171	-		
From Where Do You Access Internet	Frequency	Percent		
House	112	65,5		
School	68	39,8		
Internet Cafes or Workplaces	14	8,2		
TOTAL	171	-		
Number of Hours of Internet Using Per Week				
	Min.	Max.	Mean	Std. Dev.
171	1,00	45,00	7,1871	8,35253

Some web sites and applications were listed in the questionnaire and students were asked to mark their answers to the 1-5 Likert scaled answers, where 1 meant “never” and 5 meant “very often”. Google and YouTube web sites were the most popular sites among subjects with the average of $\bar{x}=3,2$ and $\bar{x}=3,0$ scores. Facebook was the most popular SNS with $\bar{x}=2,9$ average score when compared to Instagram ($\bar{x}=1,7$) and Twitter ($\bar{x}=1,3$). Subjects’ use of game sites and applications were scored $\bar{x}=2,8$. Another Likert-Scaled group of questions was asked to students to understand the purpose of their internet use. Some reasons listed in the questionnaire and participants were asked to mark their answers to the numbers indicating their preference. Similar to the previous answers, scale was designed as number 1 meant “never” and number 5 meant “very often”. According to the answers, finding resources for homework ($\bar{x}=3,8$) and surfing on internet ($\bar{x}=3,6$) could be accepted as the main reasons for using internet. Playing games ($\bar{x}=3,0$), visiting SNS ($\bar{x}=2,9$) and chatting ($\bar{x}=2,9$) had the similar averages. Reading news was the answer having the least score ($\bar{x}=2,1$). Table 4 summarizes the usage of internet sites and motivations of internet usage.

Table 4. Usage of applications/sites and purpose of using internet

Usage of Applications/Sites	N	Min.	Max.	Mean	Std. Dev.
Google	170	1,00	5,00	3,2353	1,55869
YouTube	170	1,00	5,00	3,0882	1,49492
Facebook	170	1,00	5,00	2,9588	1,62217
Games Applications/Sites	170	1,00	5,00	2,8176	1,51393
Instagram	170	1,00	5,00	1,7294	1,25823
Twitter	170	1,00	5,00	1,3294	,86876
Purpose of Using Internet	N	Min.	Max.	Mean	Std. Dev.
Finding Resources for Homework	170	1,00	5,00	3,8471	1,00302
Surfing	170	1,00	5,00	3,6353	1,22447
Playing Games	170	1,00	5,00	3,0294	1,42848
For SNS	170	1,00	5,00	2,9588	1,57779
Chatting	170	1,00	5,00	2,9235	1,58395
Reading News	170	1,00	5,00	2,1059	1,30110
Other	33	1,00	5,00	3,8485	,97215

According to cross-table analysis, no statistically significant relations were found between sex and internet usage ($V^2=,569$; $df=1$; $p=,451$) and family's education level and internet usage ($V^2=6,658$; $df=4$; $p=,155$) in independent sample t-test. However according to independent sample t-test scores, statistically significant relations were found between sex and purpose of internet usage. While girls used internet more than boys for finding resources for homework ($t=4,25$; $df=141,91$; $p=0.000$) and surfing ($t=3,631$; $df=155,431$; $p=0,013$); boys used internet more than girls for playing games ($t=6,283$; $df=168$; $p=0.000$), visiting SNS ($t=4,443$; $df=168$; $p=0.000$), chatting ($t=4,286$; $df=168$; $p=0.000$) and reading news ($t=3,068$; $df=152,911$; $p=0.0003$).

Discussion and Conclusion

With the development of technology and introduction of Web 2.0, usage of internet and social media increased all over the world. This caught attention of researchers and therefore studies showing internet and social media usage in different age groups, in different parts of the world and in differently developed areas increased in last decades. In this part of the study we tried to compare our results with several studies, which were explained under the subheading Internet and Social Media Use in the World. None of those studies were done with the same purpose and in similar samples. Sample sizes, locations, development levels of the regions were quite different. However our results could be compared to see whether there were similarities between these different groups.

In this study we tried to understand internet and social media usage of secondary school students aged between 10 and 15 in rural parts of city of Konya. The total of 193 students participated in this study and the 88,6% of them stated that they used internet. In Pew Research Center's study, 13-17 years old teenagers' internet usage was 92% (Lenhart, 2015) and our finding is close to this value, although our sample was in rural area since internet usage in urban and rural areas differentiates in favor of urban areas as shown in a study of Duggan and Brenner (2013:1-2).

Students use search engine Google more than social media applications and sites. The most popular social media sites were YouTube and Facebook. Instagram and Twitter were not been used in high rates in our sample. This result was partly consistent with We Are Social (<http://wearesocial.com>) and Pew Research Center's (Lenhart, 2015) studies since they showed that Facebook was the most popular platform. Moreover, Lenhart's (2015) study showed that teenagers from less wealthier families were likely to use Facebook more frequently than teens from wealthier families.

Like Korda and Itany's study (2013:18) which revealed that 90% of Y generation (18-29 age group) used mobile phones for messaging, content sharing and accessing internet, our study demonstrated that smart phones were the most popular device to access internet with a rate of 67,3%, and personal computers followed it with rate of 56,1%. Study showed that 65,5% of students reached internet mostly in their homes.

In our sample, finding resources for homework and surfing on internet were the prominent reasons of internet use. Playing games, visiting SNS and chatting had the similar averages following the previous two reasons for using internet. In a study conducted in Northern Cyprus, however, the main motivations of 12-17 years old students' internet usage were entertainment and communication Bayraktar and Gun's study (2007:191). Moreover, in another study it was found that main motivation of high school students' internet usage was making friends students in Taiwan (Lin and Tsai, 2002:411). In rural part of Zambia, a study was executed by Hoorik and Mweetwa, (2008:1), and according to the results of this study, people used internet for communicating, searching information and shopping purposes as seen in Western countries.

There were some studies, claimed that internet addicted students' daily routines, school performance and parental relations could be significantly more negative compared to non-dependent students. Such studies required different measurements to understand a student's internet addiction. In Bayraktar and Gun's study (2007:191), 1.1% of students were determined as pathological internet users. Cao and Su (2007:275) surveyed high school students and found that 2.4% of the students were internet addicted. Kim et al (2006:185) founded that 1,6% of the subjects was diagnosed as internet addict, 38% of the subjects were seen as possible internet addicts in high schools in South Korea. In a similar study in Taiwan high schools, Lin and Tsai (2002:411) showed that 11,7% of the students were internet dependent. In our study, students' time spent on internet varied between 1 to 45 hours per week, 7 hours was calculated as the average time. This study wasn't designed to measure the internet addiction of the students, however, spending a lot of time could cause internet addiction and there were 4 students (2,3%), who spend 35 hours and more in a week on internet, could be accepted as heavier internet users.

In this study no statistically significant relation were found between sex and internet usage, and between family's education level and internet usage. In contrary to our result of sex and internet usage relation, in a study, which was executed by Gilbert et al (2008:1610-1611), it was shown that woman users occupied larger portion of rural users.

Another interesting finding of this study was the existence of statistically significant relation between sex and purpose of internet usage. Girls used internet more than boys for finding resources for homework and surfing; whereas boys used internet more than girls for playing games, visiting SNS, chatting and reading news.

This study was conducted in Turkey's one of the developed city's three rural secondary schools. Results may vary in different parts of Turkey's cities. This study can be carried further with a more comprehensive and a comparative study, which will cover more sample size from different developed regions in rural and urban areas.

References

- Anthenuis Marjolijn L., Tates Kiek, Nieboer Theodoor E. 2013. "Patients and Health Professionals Use All Social Media in Health Care: Motives Barriers and Expectations". *Patient Education and Counseling*. 92, pp: 426-431. DOI: 10.1016/j.pec.2013.06.020
- Bayraktar F and Gun Z (2007). "Incidence and Correlates of Internet Usage Among Adolescents in North Cyprus". *CyberPsychology and Behavior*. 10 (2) pp: 191-197. DOI:10.1089/cpb.2006.9969
- Boyd D, Ellison N.E. (2004). "Social Network Sites: Definition, History and Scholarship". *Journal of Computer-Mediated Communities*. In: 10th Americas Conference on Information Systems, New York. pp: 210-230. DOI: 10.1111/j.1083-6101.2007.00393.x
- Brandtzaeg Petter Bae, Heim Jan (2009) "Why People Use Social Networking Sites", Conference on Online Communities, LNCS 5621, pp: 143-152. http://link.springer.com/chapter/10.1007/978-3-642-02774-1_16#page-1
- Cao F and Su L (2007) "Internet Addiction among Chinese Adolescents: Prevalence and Psychological Features". *Child Care Health Development*. 33(3) pp: 275-281. DOI:10.1111/j.1365-2214.2006.00715.x
- Duggan Maeve and Brenner Joanna (2013) The Demographics of Social Media Users-2012, <http://pewinternet.org/Reports/2013/Social-media-users.aspx>
- Gilbert Eric, Karahalios Karrie and Sandvig Christian (2008). "The Network in the Garden: An Empirical Analysis of Social Media in Rural Life". CHI Proceedings, Culture and Technology, pp: 1603-1612. <http://comp.social.gatech.edu/papers/chi08.rural.gilbert.pdf>
- Hoorik Paula and Mweetwa Fred (2008). "Use of Internet in Rural Areas of Zambia". In IST-Africa'08, Windhoek, Namibia, May 2008. ([http://www.machaworks.org/files/perslinks/Use of internet in rural areas of Zambia-1-.pdf](http://www.machaworks.org/files/perslinks/Use_of_internet_in_rural_areas_of_Zambia-1-.pdf)) (Accessed on February 15, 2016)
- <http://sgb.kulturturizm.gov.tr/TR,15252/turkiyede-internet-kullanimi-yuzde-1750-artti.html> (Accessed on February15, 2016)
- <http://wearesocial.com/uk/special-reports/digital-social-mobile-worldwide-2015> (Accessed on February15, 2016).
- <http://www.internetworldstats.com/stats.htm> (Accessed on February15, 2016)
- <http://www.jeffbullas.com/2015/04/08/33-social-media-facts-and-statistics-you-should-know-in-2015/> (Accessed on February15, 2016)
- <http://www.socialmediatoday.com/social-networks/kadie-regan/2015-08-10/10-amazing-social-media-growth-stats-2015> (Accessed on February15, 2016)
- <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=18660> (Accessed on February15, 2016)
- Kim Kyung, Ryu Eujung, Chon Mi-Young, Yeun Eun-Ja, Choi So-Young, SeoJeong-Seok and Nam Bum-Woo (2006). "Internet Addiction in Korean Adolescents and its Relation to Depression and Suicidal Ideation: A Questionnaire Survey". *International Journal of Nursing Studies* 43, pp: 185-192. DOI:10.1016/j.ijnurstu.2005.02.005
- Korda Holly, Itany Zena (2013) "Harnessing Social Media for Health Promotion and Behavior Change " *Health Promotion Practice*. 14(1), pp: 15-23. DOI:10.1177/1524839911405850
- Lenhart Amanda (2015) <http://www.pewinternet.org/2015/04/09/teens-social-media-technology-2015/> (Accessed on February15, 2016)

- Lin Sunny SJ and Tsai Chin-Chung (2002). "Sensation Seeking and Internet Dependence of Taiwanese High School Adolescents". *Computers in Human Behaviour*. 18, pp: 411-426. DOI:10.1016/S0747-5632(01)00056-5
- Morehead Anne, Hazlett Diane E, Hoving Ciska (2013) " A New Dimension of the Uses, Benefits and Limitations of Social Media for Health Communication" *Journal of Medical Internet Research*, 15 (4), e:85, www.ncbi.nlm.nih.gov/pec/articles/PMC3636326/ DOI:10.2196/jmir.1933