

# New Media and Children

## Internet Content Preferences of Primary School Children in Turkey

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**Abstract**—As the technology develops and expands, computers have a very significant role in the world of children. The aim of this survey is to study the internet habits of 6-13 age groups of children. Moreover, we will deal with how they utilize the new media tools in Turkey. A questionnaire is prepared content with this research and is applied on 366 participants from various regions of Turkey. Sampling of the research consists of 366 children of 6-13 age groups. The research data are analyzed in the program of SPSS 10.0 in the frequency and chi square test analysis. The results of the field survey reveals: 61,9 % of children have internet access at home. In addition, 95,8 % of the children are internet users. 49,1 % of the children are in the internet to play games, 26 % of them to communicate with friends and only 6,0 % of the children use internet to do “homework”.

**Index Terms**—Technology, internet, new media, primary school children, social networks

### I. INTRODUCTION

The concepts of “new media”, “new platform”, “new tools” reflect the digital platform developed by the computer technology. Virtual reality, multimedia, interactive platforms, social media, blogs, e-mail platforms, interactive TV, podcast and various mobile media tools are part of the “new media”. The catalyzing effects of those tools, which transform the basic needs and ways of interaction on daily basis, are specially emphasized (Fallows, 2004). Those tools that create their own style and content, gained broader mention in Communications Literature as of late 1970’s and since then, they have been more in focus of the contextual surveys made to analyze economical and social transformations within 1990’s (Thompson, 1995: 23-25). The reaction of the children to the new media tools is the subject of this research.

The new media tools that play a crucial role in the contemporary social life practices, also rebuild the information, knit the new semantic networks and reform the social codes. Besides, being the generator of the popular culture, they bridge between the old and the new social images. The cultural power of those tools is worth to mention in terms of creation, expansion and continuity of the culture itself. The five fundamental factors are what make those media “new” and also those factors are the reason behind the rapid and continuous expansion of them. The five fundamental factors can be listed as modularity, quantity representation, variability, decoding and automation (Manovich, 2001: 27-48). Besides the ease of expansion of the new media, those factors support the quality of the new media being user friendly, compliance with the diverse needs of the users. At the same time, the mediated nature

of these digital environments inflects everyday practices in new ways and widespread children engagement with these sites has reshaped certain aspects of children sociality (Boyd, 2008: 13-20). Therefore, the expansion of the use of those tools among the children is closely related to those qualities.

When we focus on the liaison between the children and the new media tools, we see significant outcomes. Social network sites incorporate features from a wide array of other genres of social media, including blogs, instant messaging, email, bulletin boards, chatrooms, and media-sharing sites (Boyd, 2006). Initially, the numbers of children using the new media tools are striking. The survey in USA reveals 70 % of 2-17 age group of children have computers at home; 52 % of them have internet connection at home (Woodard and Gridina, 2000). The survey also reveals that children spend more than 4-5 hours per day using the new media tools such as video, computer and internet (Woodard and Gridina, 2000). Including usual media tools like TV, radio the amount of time spent hits up to 8 hours per day (Baron and Broughton, 2001: 1222-1226). The intensive usage of the new media tools today, definitely transforms the adult-children relationship (Sevinç, 2005).

As we get into the literature, we spot the surveys especially questioning the children-new media liaison via internet. Such surveys are mostly in English as well as in Turkish. Surveys on “Security of Children’s Access to the New Media Tools” are the most common ones (Odabaşı, 2005; Moble and Wilson, 1998:109-113; Akgündüz and Avanoğlu, 2006; 67-83). Moreover, there are rather pedagogical surveys that question the effects of the new media usage (Li and Atkins, 2004: 1715–1722; Davis, 2001: 187-195). We also encounter some surveys that are specially focused on the children access to the internet technology (Shields, 2000: 4-30; Vandewater, et al., 2007: 1006-1015; Boyd, 2007; Sönmez and Uysal, 2005; Wartella, et al., 2002; Machin and Davies, 2003). This survey is part of the latter group of surveys. The survey is carried on the most significant content of the new media tools that is the internet. Moreover, it questions the content preferences and purpose of the children-using internet as the new media tool.

### II. METHOD AND SURVEY DESIGN

The survey includes samples from Eastern Anatolia, Southeastern Anatolia, Marmara, and Aegean provinces. The primary school children are asked to complete the questionnaire and the results reveal the defining statistics of content preference of the subject children in the new

media tools. Primary school children are 6-13 age groups of students.

*A. The purpose and significance of the survey*

This survey aims to reveal the new media preference of the children. Therefore, how the children use internet and internet tools, the variation of their internet content preference and their rate of holding e-mail accounts and Social Networks are questioned. To secure healthy growth of the future generations, conscious usage of the internet media is crucial. Considering the rapid spread of the internet tools and their interactive nature, studying the approach, attitude, habits and behavior of the children are very much up to the point. Therefore, academic surveys focusing on that content are expected to contribute in the awareness of the parents as well as to increase the level of consciousness of the children. As the volumes of such surveys grow, this will also compile a significant literature. Moreover, the territory of the survey also includes East and South East Anatolia regions. The data of those regions are especially important for the outcome of the survey.

*B. Significance of the Survey*

A questionnaire is applied to test the habits of children using internet and new media. The academicians because of their research develop the content of the questionnaire. The references are based on the works of Shields, 2000: 4-30; La Ferle, Edwards and Lee, 2000: 55-65; Biocca, 2000: 22-29. The questionnaire includes questions about the demographical information of the participants, their internet content preference, their points of access to the internet, their aims to use the internet, their ways of using the social and network sites in the internet. Most of the questions in the questionnaire are Yes/No questions as well as multiple choices. The questionnaire is pretested on sampling of 15 primary school children. Considering the results of the pretest, the necessary corrections are made and the questionnaire form is fine-tuned. Due to the convenience of application of the questionnaire, the fieldwork is performed in Eastern Anatolia Region, Black Sea Region at the North and Marmara Region at the North West of Turkey. The results of valid 336 forms out of 450 are evaluated. This survey has an investigative quality.

*C. Sampling Management*

The survey consists of subjects from total 4 primary schools in Elazig, Samsun, Istanbul metropolitan areas. The students included in the survey are randomly selected. 234 of the participating children are in the age group of 6-9 years of old, 236 of them are in the age group of 10-13 years old. 162 of the sampling are female and 288 are male. The data concerning age group of 6-9 years old are derived from the results of the questionnaire applied by parents. The data concerning age groups of 10-13 years old children are derived from the results of the questionnaire applied by the researchers directly to the children at schools.

*D. Questions of the survey*

The questions in content with the survey are listed as below:

**Q 1:** What is the rate of internet account ownership of the children at primary school level?

**Q 2:** What is the frequency of the internet access of the primary school children?

**Q 3:** What is the range of internet content preference of the primary school children?

**Q 4:** How is the liaison of primary school children with the interactive games and social networks in the internet?

**Q 5:** What is the purpose of internet access of primary school children?

**Q 6:** What is the level of inspection in the internet access of primary school children?

**Q 7:** What is the role of the internet in social activities of the primary school children?

*E. Method of data collection and research obstacles*

The questionnaire form consists of 19 questions that are compiled by the researchers in consideration of the related literature. The questionnaire form is designed as a single chapter that consists of questions related to children rate of internet account ownership; demographic information about the children and his/her family and the habits of using the new media tools of the children. In the literature in Turkish, the studies on the liason of the children with the new media are very scarce. Therefore, one of the obstacles of the survey is the scarcity of the related secondary information in Turkish literature. Moreover related to the geography of the application, time and budget are also further obstacles. That is why the survey is carried out in 3 regions, namely Eastern Anatolia, Black Sea and Marmara Regions with 450 participants. The content of the survey itself is another obstacle. The new media tools also include game portals and mobile phones in the literature. However, the children exclude the mobile tools considering their low rate of use.

*F. Data Analysis and Findings*

Following the elimination of the misfiled or incorrectly filled questionnaires, total valid questionnaires are 366 in quality. Computerized data analysis is performed by SPSS 10.0 program. The data concerning internet usage of the children are processed by Chi square test analysis method; Variance Analysis processes the data concerning the time the children allocate to computers and the internet and Frequency Analysis processes the data concerning the rate of internet account ownership.

*1) The Rate of Internet Ownership of the Participants and Their Points of Access*

The survey reveals 61.9 % of the participants have internet connection at home, majority (95.8 %) of them use it. As can be seen at Table-1, the rate of primary school children who do not use internet is only 4.2 %; therefore, the computers are at ease of access for the children at home.

TABLE I.  
THE RATE OF PARTICIPANTS OWNING INTERNET CONNECTION AT HOME AND THE RATE OF INTERNET ACCESS

	Yes		No		Total	
	n	%	n	%	n	%
The ones who have internet connection at home	208	61.9	128	38.1	336	100.0
The ones who use the internet	322	95.8	14	4.2	336	100.0

In Table-2, the rate of using the internet at places other than home is given. Due to Table 2, 86.3 % of the participants use the internet at places other than home. 76.3 % of the participants between 11-13 age groups, 23.7 % of the participants between 7-10 age groups do use the internet at places other than home.

The participants use internet at friends' the most (37.5%), internet cafe (30.7 %), the school (29.7%) and the library (2.1%) if not at home. 81.4% of the participants of 11-13 age group, 18.6% of the participants of 7-10 age group attend the internet café. 67.2 % of the participants of 7-10 age group mostly use the internet at friends'. The result of the analyses, age versus internet ownership  $F(3,823)=.000$   $p<0.01$ , using the internet  $F(3,823)=.000$   $p<0.01$ , playing games in the internet  $F(3,823)=.000$   $p<0.01$  indicate statistically consistent relationship. The survey also reveals the rate of ownership of the internet and e-mail accounts, time spent in the internet as well as the access to the social network sites and interactive games increase as the age grows up. Therefore compared to the participants of 6-9 age groups, the participants of 10-13 age group own internet accounts and spend more time in the internet using the new media tools.

2) *The Frequency of the Participants to Use Internet*

Table 4 indicates how frequent the participants use the internet. It is given that 47,2 % of the participants use the internet every day; 31 % two/three days a week; 13,4 % once a week; 4,8 % once in two weeks; 2,1 % once a month and 1.5 % very rare.

Table 5 indicates 14.2% of the participants use the internet less than 1 hour per day; 25.6 % 1-3 hours per day; 17.3 % 4-6 hours per day; 16.4 % 6-8 hours per day; 3.0 % 8-10 hours per day. 7.1 % of the participants use the internet whole day while 16.4 % of the participants are unlimited.

3) *The Participants' Habits of Using the Internet*

Table 6 indicates the rate of participants playing game in the internet. A great majority of the participants (95,2 %) play games in the internet. Table 2.8 indicates which games the participants prefer.

Table 7 indicates the children prefer Ben 10 the most (43.8%), Bakugan (35.1%), Naruto (14.8 %) and Kayu (6.3 %) games. Moreover the children continuously follow up one of the flash game site kraloyun.com, Farmville in Facebook and a pirate multiplayer game at seafight.com.

Table 8 indicates the rate of e-mail account ownership of the children. As given in the Table 2.8 the majority of the participants (72.6 %) own an e-mail account. The rate of children who do not have an e-mail account is 27.4 %.

Table 9 indicates the children mostly use *Facebook* (76.2%), *Twitter* (10.7%), *Flickr* (5.4%) and *Mynet Eksenim* social network sites.

TABLE II.  
THE RATE OF PARTICIPANTS WHO USE INTERNET AT PLACES OTHER THAN HOME

The rate of participants who use the internet at places other than home	Yes		No		Total	
	n	%	n	%	n	%
	290	86.3	46	13.7	336	100.0

TABLE III.  
WHERE DO THE PARTICIPANTS USE THE INTERNET MOST IF NOT AT HOME?

	n	%
School	100	29.7
Friends	126	37.5
Internet Cafe	103	30.7
Library	7	2.1
Total	336	100.0

TABLE IV.  
TIME SPENT IN THE INTERNET

	n	%
Every day	159	47.2
Two/three days a week	104	31.0
Once a week	45	13.4
Once in two weeks	16	4.8
Once a month	7	2.1
Rarely	5	1.5
Total	336	100.0

TABLE V.  
THE HOURS SPENT IN THE INTERNET

	n	%
Less than 1 hour	48	14.2
1-3 hours	86	25.6
4-6 hours	58	17.3
6-8 hours	55	16.4
8-10 hours	10	3.0
Whole day	24	7.1
Unlimited	55	16.4
Total	336	100.0

TABLE VI.  
THE RATE OF PARTICIPANTS PLAYING GAMES IN THE INTERNET

Playing games in the internet	Yes		No		Total	
	n	%	n	%	n	%
	320	95.2	16	4.8	336	100.0

TABLE VII.  
THE PARTICIPANTS' INTERNET GAME PREFERENCES

	n	%
Ben 10	147	43.8
Bakugan	118	35.1
Naruto	50	14.8
Kayu	21	6.3
Total	336	100.0

TABLE VIII.  
THE RATE OF PARTICIPANTS OWNING AN E-MAIL ACCOUNT

e-mail account	Yes		No		Total	
	n	%	n	%	n	%
	244	72.6	92	27.4	336	100.0

TABLE IX.  
THE SOCIAL NETWORK SITES USED BY THE CHILDREN

	n	%
Facebook	256	76.2
Twitter	36	10.7
Flickr	18	5.4
Mynet Eksenim	26	7.8
Total	336	100.0

Table 10 indicates that children mostly use internet to play games (49,1 %), communicating with friends (26,0 %), lessons/homework (6.0 %), seeking information and listening music (5.1%), e-mail (4.5%) and entertainment (4.2 %).

Table 11 indicates the parents are not aware of the half (53.9 %) of the sites the children access.

Table 12 indicates 91.4 % of the children do not have a preventing program or filter against harmful content.

Table 13 indicates majority of the children (80,4 %) access to porno, violence or other harmful content sites.

Table 14 indicates 22, 9 % of the children do online shopping, whereas 77,1 % do not.

Table 15 indicates 80,1 % of the children chats online.

To chat online children mostly use MSN (60,4 %) and Facebook (19,6 %).

Given the choice, the children mostly prefer to play outdoors (44 %), surfing in the internet (43.8%), practicing sports and watching TV (4.5 %) and reading books (3.2 %). 7-10 age group of children mostly prefer playing outdoors (69.3 %), 11-13 age group of children mostly prefer surfing in the internet (78.6 %).

TABLE X.  
THE PURPOSE OF CHILDREN TO USE INTERNET

	n	%
Seeking information	17	5.1
Game	165	49.1
Listening Music	17	5.1
Lessons/Homework	20	6.0
E-mail	15	4.5
Entertainment	14	4.2
Communicating with friends	88	26.0
Total	336	100.0

TABLE XI.  
THE PARENTS' AWARENESS OF THE SITES ACCESSED BY THE CHILDREN

The Parents' Awareness of the Sites Accessed by the Children	Yes		No		Total	
	n	%	n	%	n	%
	155	46.1	181	53.9	336	100.0

TABLE XII.  
THE RATE OF USING PREVENTING PROGRAM OR FILTER AGAINST HARMFUL CONTENT

The rate of using preventing program or filter against harmful content	Yes		No		Total	
	n	%	n	%	n	%
	29	8.6	307	91.4	336	100.0

TABLE XIII.  
THE RATE OF CHILDREN WHO ACCESS TO HARMFUL CONTENT SITES

The rate of Children who Access to Harmful Content Sites	Yes		No		Total	
	n	%	n	%	n	%
	270	80.4	66	19.6	336	100.0

TABLE XIV.  
THE RATE OF CHILDREN DOING ONLINE SHOPPING

The rate of children doing online shopping	Yes		No		Total	
	n	%	n	%	n	%
	77	22.9	259	77.1	336	100.0

TABLE XV.  
ONLINE CHATTING INTERFACE OR PROGRAMS USED BY THE CHILDREN

	n	%
Facebook	66	19.6
MSN	203	60.4
Total	269	100.0

TABLE XVI.  
PREFERENCES OF THE CHILDREN

	N	%
Reading books	11	3.2
Practicing sports	15	4.5
Playing outdoors	148	44.0
Surfing in the Internet	147	43.8
Watching TV	15	4.5
Total	336	100.0

TABLE XVII.  
THE RATE OF CHILDREN CHATTING ONLINE

Online Chatting	Yes		No		Total	
	n	%	n	%	n	%
	269	80.1	67	19.9	336	100.0

### III. CONCLUSION

Rapid technological developments seriously changed mass communication tools, the ways they are used and even the ones who use them. In this era of change, not only the youngsters but also the children also get introduced to the technology much earlier and absorbs it as part of their daily life. Internet, being the most important one of these tools becomes a new socializing medium as well as changing the way the children communicate and grab the information. This survey reveals the internet attitude of the children in Turkey in dimensions of time, place, styles, and purposes. Therefore, the following findings are worth to mention:

- The survey reveals 61,9 % of the participants have internet access at home, majority of them (95,8 %) use the internet. Considering only 4,2 % of primary school children do not use internet, the computers meet with children at home to a great extent. Considering the sampling from Turkey, technology ownership is also astonishing.
- The survey reveals 47,2 % of the participants use internet every day and that means one of every two children Access the internet for a while every day. Then we see only 14,2 % of the primary school children use internet less than 1 hour daily. This means remaining 85,8 % remains in the internet more than at least 1 hour. Therefore, internet is a crucial part of children's daily life.
- The survey reveals 86.3% of the children use internet at places other than home. That high rate brings along some question marks. For instance 30,7 % of the participating children affirm that they use internet in the internet cafes. This is a considerable conclusion especially when age group 6-13-year-old group is focused. The internet cafes are supposed to be forbidden for that age group. Therefore, one of every three children of 6-13 age groups gets in the internet cafes. On one side, this reveals a weakness of executing the law, on the other side it indicates exposure to the uninspected content. This is how the children confront unpleasant situations related to their liaison

with internet. Actually, 80,4 % of the children affirm that they access sites of porno, violence or other harmful content. This is an overt danger and a threat to be resolved. 91,4 % of the children do to have a filter to prevent the access to the harmful content even at home. Actually, more than half, 53.9 % of the participants affirm that their parents are not aware of the sites they have been through surfing.

- The survey reveals the high rate of social interaction sites usage and that tells us children have a new way of socializing. 95,2 % of children play games in the internet; 72.6 % communicate via e-mail; 76,2 % use the Facebook. On top of that the children's purpose of using the internet reveals interesting results: 49,1 % of children use internet to play games, 26% to communicate with friends. Only 5,1 % use internet to seek information or to do homework. The main purpose of using internet should be seeking information however this is so low that we think children must be trained about it.
- Finally, we see that children prefer to be in the internet by 43.8 % immediately after they prefer playing outdoors by 44 %. Apparently, internet competes to become a crucial socializing tool. The low rate of preferring watching TV by 4,5 %, is a noticeable indication on internet against TV in the near future.

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