International Journal on New Trends in Education and Their Implications
January, February, March 2011 Volume: 2 Issue: 1 Article: 3 ISSN 1309-6249

TURKISH PRIMARY SCHOOL CHILDREN'S OPINIONS RELATED TO THE INTERNET AWARENESS

Assist. Prof. Dr. Ali ERSOY
Faculty of Education
Anadolu University, Eskisehir, TURKEY

ABSTRACT

The purpose of the study is to examine the opinions of the primary school students on the Internet awareness with reference to some variables. Total 2911 participants from fourth to eighth grades in three public primary schools, which have middle socio-economic status participated in the study. The data were gathered through questionnaire and analyzed through descriptive statistics such as frequency, percentages and chi-square. The findings revealed that the Internet awareness of the participants show significant difference in terms of their gender, grade levels, having Internet access at home, the location of Internet access, the purpose of the Internet use, the occupations, and educational backgrounds of the parents. It was observed that while male students focused more on the positive aspects of the Internet, female students focused more on the unfavorable aspects of the Internet. Likewise, it was found that the Internet awareness of the participants increased when their grade levels get higher. It was also found that the Internet use purposes of the male students were mostly playing games whereas female students mostly use the Internet for the purpose of watching filmThe Internet awareness of the participants who have Internet access at their home and who use it at home is higher than that of other participants, who do not have Internet access at their home. The findings of the present study revealed that the participants, whose mothers were housewife and the participants whose fathers were tradesmen, civil servant and labors, as well as the participants whose parents have a higher educational background have higher Internet awareness than that of other participants. With reference to the findings, it can be suggested that some training activities on the Internet awareness for the mothers, who are housewives, can be handled within the school-parent relationship activities.

Keywords: Internet awareness, primary education, children.

INTRODUCTION

The Internet is an important source that eases to reach ample of information for children (Kiili, Laurinen, & Marttunen, 2008) in terms of their education, learning, fun and communication (Hick & Halpin, 2001). It is an infinite virtual environment, which helps the development of children and provides plenty of opportunities to make self-discoveries (Varnhagen, 2007). Besides using Internet for the purpose of fun and education, children also become socialized through sharing e-mails or chatting with their friends on the Internet. Furthermore, children might enrich their life quality and gain various advantages related to their future life. Therefore, Internet is assumed as a noteworthy technology for children (Madell & Muncer, 2004). Moreover, children might surf on the Internet, discover different cultures, experience numerous technologies and communicate with a variety of people. Such experiences might also facilitate the cognitive and social development of the children (Varnhagen, 2007). Thus, several studies in the literature revealed that children make use of Internet for the purposes of fun, education and communication.

The studies from the different parts of the world that were related to the children and Internet revealed that children generally use Internet for fun activities, especially for playing games (Cranmer, Selwyn & Potter, 2009; Day, Janus, & Davis, 2005; Ersoy & Yaşar, 2003; Ersoy & Türkkan, 2009; Livingstone, 2003) or watching films (Cranmer, Selwyn & Potter, 2009). In the same way, several studies also proved that children use Internet for

the purpose of doing their homework or searching for their schoolwork (Day, Janus, & Davis, 2005; Ersoy & Türkkan, 2009; Livingstone, 2003), for communication purposes (Day, Janus, & Davis, 2005; Livingstone, 2003), or for surfing information about their hobbies or the celebrities (Valkenburg & Soeters, 2001). For instance, a study, which was conducted in England with 9 to 19 year old participants, revealed that 90% of the participants used Internet for their school works and 60% of them considered Internet as a useful tool for finding information about their homework (Livingstone & Bober, 2004). In terms of cognitive and social developments of the children, these can be regarded positive and favorable aspects of Internet.

Naturally, the children might easily access to harmful contents on the Internet. This is one of the unfavorable aspects of the Internet that might have a negative effect on social and cognitive developments of children. The children might face with harmful contents on the Internet such as pornography, hatred, harassment or even kidnapping (Varnhagen, 2007). The children might accidentally access to a pornographic Web site (Shukor, 2006), or even become a pornography object (Hick & Halpin, 2001) while searching information for their homework and they might accidentally share their personal information with people whom they do not know well (Turow, 2001).

The schoolchildren's accidentally access to harmful content on the Internet is assumed as the most important Internet safety issue (Wishart, 2004). In a study conducted by Cranmer, Selwyn and Potter (2009), three quarter of the participants stated that they know the ways of protecting themselves when they faced a threat or a jeopardous situation on the Internet. Similarly, Valcke et.al.'s (2007) study revealed that Belgian primary school students encountered various internet safety issues while chatting such as, sharing photographs or personal information with people whom they do not know well or meeting with people whom they met on the Internet.

Establishing a children-safe Internet content and Internet access for whitelists (Varnhagen, 2007), pros and cons of Internet technologies for children and teenagers (Cranmer, Selwyn & Potter, 2009) were the hot issues that have recently been debated by the society, educators and parents. Especially following the widespread use of Internet, the issues such as online safety, pornography, privacy, hatred, harassment, online games containing violence, finding contents in mother tongue, inappropriate information, lack of research skills and Internet awareness which in turns covers all of these issues become a hot debate in the agenda. All of these circumstances necessitate raising and strengthening the Internet awareness of children, enabling safe Internet access and effective and efficient Internet use for children either from their home, school or from any other location. The Internet awareness can be defined as having knowledge on the favorable and unfavorable aspects of the Internet in terms of using it in a safe, effective and efficient manner as well as practicing this knowledge while surfing on the Internet. Children should be aware of favorable and unfavorable aspects that they might face on the Internet. In this respect, the critical evaluation skills and internet-wise of the children should be enriched and strengthened in order to share their opinions safely on the Internet (Varnhagen, 2007). Since, the number of online children and online opportunities for them are increasing day by day.

Recently, home Internet access ratios in Turkey gradually increased from 19.7% (2007) to 24.5% (2008), 30% (2009) and 41.6% (2010). In 2005, this ratio was only 8.6% in Turkey (Turkish Statistical Institute [TSI], 2010). Additionally, between the years 2003 and 2008, 100% of the secondary schools and 94% of the primary schools in Turkey were provided Internet access by the governments (The Ministry of National Education [MoNE], 2010). There were almost eleven thousand students in the primary schools in Turkey in 2008 (MoNE, 2008) and almost all of them had Internet access at their schools. When the numbers of the child Internet users (7 to 14 years old students) who have Internet access out-of their schools were added to the total number of students who have Internet access at their home, it can be fairly claimed that all of the students in primary schools in Turkey have Internet access in some way. However, there is very limited information on what these Turkish primary school students do while they were using Internet, as well as on their perceptions related to Internet

and on their Internet awareness. Similarly, there were very limited study findings related to what parents and teachers think about the children's Internet use habits in Turkey.

According to Turkish Informatics Report of 2002, almost 90% of the teenagers, who are between 7 to 15 years old, use Internet for surfing on either entertainment or useless Web sites (The Council of Internet, 2002). One of the pioneering studies related to Internet and parents that conducted in Turkey, Odabası (2005) found that the parents of primary school children mostly concern the economic and academic aspects of Internet rather than its safety issues. However, Hudley and Shyles (2010) highlighted that both the safety issues and online threats for children should be the focus of the forthcoming studies. One of the ways of examining the pros and cons of Internet for children is to inquire students' opinions on this issue. Thus, a clear picture of the online threats that primary school students might face on the Internet and opinions of the students related to those threats might be figured out through examining their opinions. The purpose of the present study is to examine the opinions of the primary school students on the Internet awareness in Turkish context. To that end, the Internet awareness of the Turkish primary school students will be examined with reference to some variables such as the students' grade levels, gender, having Internet access at home, the location of Internet access, the purpose of Internet use, the occupations of the parents, and the educational background of the parents.

METHODOLOGY

Participants

The participants of this descriptive study were the public primary school students, who have middle socio economic status. The present study was conducted in 2009, in the 4^{th}, 5^{th}, 6^{th}, 7^{th} and 8^{th} grades of three different public primary schools in the city center of Eskişehir. The schools were selected with reference to the socio-economic classification of the schools by the Eskişehir provincial directorate of National Education Ministry. The demographic information of the participants on the subject of their grade levels, gender, having Internet access at home, the location of internet access, the purpose of the internet use, the occupations of the parents, and the educational backgrounds of the parents were provided in Table 1.

Table 1
Demographic Information of Participants

Variable	Subgroups	Frequency	Percent
	4	481	16,52
	5	522	17,93
Grade	6	617	21,20
	7	674	23,15
	8	617	21,20
Gender	Female	1359	46,68
	Male	1552	53,32
Internet at home	Yes	2217	76,2
	No	694	23,8
	Home	2208	75,9
	School	87	3,0
	Internet cafe	394	13,5
Internet use location	My parents' workplace	69	2,3
	Friends' house	70	2,4
	Other	83	2,9
	Homework	2792	95,9
	Gaming	2229	76,6
	Music	1788	61,4
Purpose of the	Chat	1575	54,1

Internet use	Films	1246	42,8
	E-mail	737	25,3
	News	528	18,1
	Other purposes	205	7,0
	Housewife	2081	71,5
	Labor	153	5,3
Mother occupation	Civil servant	499	17,1
	Tradesmen	79	2,7
	Retired	84	2,9
	Deceased	15	,5
Father occupation	Tradesmen	934	32,1
	Laborer	822	28,2
	Civil cervant	834	28,6
	Retired	266	9,1
	Deceased	41	1,4
	Unemployed	14	,5
Mother education	No school	49	1,7
	Compulsory education	1378	47,3
	High school	812	27,9
	University	672	23,1
Father education	No school	9	,3
	Compulsory education	807	27,8
	High school	1020	35,0
	University	1075	36,9
Total		2911	100,0

Total 2911 (1552 male, 1359 female) students from 4th, 5th, 6th, 7th and 8th grades participated in the study. 53.32% of the participants were male whereas 46.68% of them were female students. Furthermore, 76.2% (N=2216) of all of the participants have Internet access at their home. This ratio is higher than the average (41.6%) of home internet access at home in Turkey. Almost three quarter of all of the participants have Internet access at their home and most of them use it at their home. The main Internet use purposes of the participants were doing homework (95.9%), playing game (76.6%), listening to music (61.4%), and chatting (54.1%). Most of the fathers (88.9%; N=2590) of the participants have an occupation whereas 9.1% (N=266) of them were retired. Specifically, 98% of the fathers of the participants have a regular income. 72% (N=2096) of the mothers of the participants do not have any occupation, and 71.5% of them were housewives. In terms of the occupation of the fathers of the participants, 32.1% of them were tradesmen, 28.6% of them were civil servant and 28.2% of them were laborers. Likewise, in terms of the occupation of the mothers of the participants, 17.1% (N=499) of them were civil servants. Regarding the educational backgrounds of the parents, roughly 1.7% (N=50) of them were non-school graduates whereas almost half (47.3%, N=1377) of the parents were graduates of compulsory education. In terms of the educational backgrounds of the fathers, 36.9% (N=1075) of the fathers were university graduates and 35% (N=1020) of them were the graduates of secondary schools.

Data collection and analysis

The data were gathered by means of a questionnaire that was developed by the researcher. The questionnaire consisted of two sections, which inquire the demographic information about the participants and the opinions of the participants related to their Internet awareness. The demographic information section of the questionnaire included nine items, which specifically inquire the participants' grade levels, gender, having Internet access at home, the location of Internet access, the purpose of Internet use, the occupations of the parents, and the educational backgrounds of the parents. The data obtained by means of the demographic

information section of the questionnaire were used as independent variable to compare the opinions of the participants related to their Internet awareness. The second section of the questionnaire, which inquires the opinions of the participants related to their Internet awareness, included nine three-point Likert type questions. The data were analyzed through descriptive statistics such as frequency, percentages and chi-square. The significance level for all of the statistical calculations was regarded as .05.

All of the participants filled in the questionnaires during their regular class hours in their classes. The questionnaire was photocopied as much as the number of the students in each grade levels in the schools. The counseling services of the schools were asked to help researcher while the participants were filling in the questionnaires. The researcher got prior appointments with the administration of the schools for conducting the questionnaire; informed the counseling services of the schools about the content of the study and questionnaire and the questionnaires were administered by the researcher and four experts under auspices of the regular teachers of each grade level. The total questionnaire fill-in process took roughly 20-25 minutes.

FINDINGS

Table 2 below illustrated the frequencies and percentages of participants' responses for each item on the questionnaire.

Table 2
Summary of Descriptive Statistics for Awareness of the Internet

	Disagree		Neutral		Agree	
Item	N	%	N	%	N	%
I think I have right to have access to the Internet.	142	4.9	443	15.2	2326	79.9
I would like to have more information I can utilize on the Internet.	104	3.6	322	11.1	2485	85.4
I believe that content on the internet may be harmful to me.	380	13.1	453	15.6	2078	71.4
I believe the Internet allows me to think outside the school.	269	9.2	740	25.4	1902	65.3
I know who I can get help from when I face a threat online.	254	8.7	590	20.3	2067	71.0
I can reach more information about my courses online.	280	9.6	685	23.5	1946	66.8
I believe that Internet can develop my computer literacy.	253	8.7	619	21.3	2039	70.0
I know that there might be people who may harm me online.	255	8.8	361	12.4	2295	78.8
I'm happy that my homework can be seen online.	355	12.2	497	17.1	2059	70.7

Gender

The participants' opinions related to harmful content and people on the Internet showed significant difference in terms of their genders [$\chi^2(2)=29.20$; p=000, p<.05; $\chi^2(2)=35.97$ p=000, p<.05]. That is, much greater than boys do, girls believed that there are harmful content and people on the Internet. For instance, 75.9% and 83.1% of the girls believed that there are harmful content and harmful people on the Internet respectively, whereas, the ratio was found as 67.5% and 75.1% among the boys. In terms of the contribution of the Internet to the learning process out-of-school, 66.2% of the boys and 64.2% of the girls believed that Internet makes a contribution to their learning in the out-of-school. The difference was significant in terms of the gender

[$\chi^2(2)=3.50$; p=000, p<.05]. Similarly, 69.7% of the boys believed that they can access plenty of course related information via Internet, whereas, 63.6% of the girls hold the same opinion with the boys. Likewise, 73.1% of the boys believed that Internet helps them to develop their computer literacy, whereas, 66.5% of the girls agreed with boys on this issue. The differences in the opinions of the participants on these issues were also significant in terms of their genders [$\chi^2(2)=11.81$; p=003, p<.05; $\chi^2(2)=15.65$; p=000, p<.05]. Thus, it can be claimed that the awareness of the female students on the harmful sides of the Internet is higher than that of male students, whereas, the awareness of the male students on the educational contribution of the Internet was higher than that of the female students. These differences might stem from the illiteracy of the girls and higher experiences of the boys in the Internet use.

Grade

In terms of the grade levels of the participants, there was a significant difference among the grade levels in considering the Internet use as a right [$\chi^2(8)=101.94$ p=000, p<.05]; besides, considering the Internet use as a right showed an increase from the fourth grade to eighth grade respectively (68.8%; 75.9%; 77.3%; 84.1%; 90%). That is, when the grade levels of the participants get higher, they extensively start to think that the Internet use is a right for them. It was found that, the opinions of the participants related to the idea that there is harmful content on Internet show significant difference in terms of their grade levels [$\chi^2(8)=47.20$ p=000, p<.05]; that is, the participants, who less agreed that there is harmful content on the Internet were the eighth graders (64.5%) and the fourth graders (69.2%), whereas, the participants who mostly believed that there is harmful content on the Internet were the fifth graders (74.9%) and seventh graders (74.2%). Similarly, it can be claimed that the opinions of the participants related to the idea that there are harmful people on the Internet showed significant difference in terms of the grade levels of the participants [$\chi^2(8)=9.80$ p=279, p<.05] and the ratios of the agreement of the participants concerning their grade levels were as follows; 78.0%; 81.2%; 81.0%; 78.0% and 76.2% (from fourth grade to eighth grade respectively). As the ratios above revealed, the eighth graders were the ones who less agreed that there are harmful people on the Internet. It was observed that when the ages of the participants get higher, the ratio of agreement with the idea that there are harmful people on the Internet becomes lower, which can be explained with the fact that Internet experience increase along with growing old of the participants. It was found that there was a significant difference in the opinions of the participants in terms of knowing the source of help when they faced a threat on the Internet [$\chi^2(8)=57.16$ p= 000, p<.05]. The ratios of the agreement of the participants in terms of knowing the source of help when they faced a threat on the Internet were as follows; 82.7%; 73.6%; 71.0%; 64.8% and 66.5% (from fourth grade to eighth grade respectively). Thus, it can be claimed that the lower grades are better in knowing the source of help when they faced a threat on the Internet. This can be explained with the fact that the young children usually ask for help whenever they faced a threat.

As for the grade levels, there was a significant difference among the opinions of the participants related to the concept that "I can reach more information about my courses online" [$\chi^2(8)=22.51$ p=004, p<.05]. It was observed that while the participation rates for this opinion were decreasing in the fourth and fifth grades, they increased in the sixth and eighth grades. The participants, who mostly believed that they can reach wealthy information associated with their course subjects on the Internet were the eighth graders (72%); whereas, the fifth graders were the ones who less believed that they can reach wealthy information associated with their course subjects on the Internet (62.6%). It was observed that the satisfaction of publishing their homework on the Internet and their grade levels were significant [$\chi^2(8)=33.32$ p=027, p<.05]. The participants who mostly satisfied with the publication of their homework on the Internet were the fourth graders (78.2%), whereas, the participants who least satisfied with the publication of their homework on the Internet were the seventh graders (66.5%). That is, it can be claimed that the younger students are the ones who most satisfied with (impressed with) the publication of their homework on the Internet.

Internet at home

In terms of the availability of Internet access at home, there was a significant difference among the opinions of the participants concerning the Internet access as a right for themselves [$\chi^2(2)=47.56$ p=000, p<.05], that is, the participants, who have internet access at home, mostly believed that the internet access is a right for themselves (82.2), whereas, the participants, who do not have internet access at home, did not regard the internet access as a right for themselves (70.7%). Similarly, with reference to the availability of Internet access at home, there was a significant difference among the opinions of the participants on the idea that there is harmful content on the Internet [$\chi^2(2)=19.03$ p=000, p<.05]. That is, the participants, who have internet access at home, mostly believed that there is affluent information on the Internet (87%), whereas, the participants, who do not have internet access at home did not share the same opinion as much as others did (80.3%). Thus, it can be claimed that the students, who have internet access at home considered the Internet use as a right for themselves and expected to find more information on the Internet when it is compared to the students who do not have Internet access at their home. Likewise, with reference to the availability of Internet access at home, there was a significant difference among the opinions of the participants on the idea that there are harmful people on the Internet [$\chi^2(2)=10.57$ p=005, p<.05]. That is, the participants, who have internet access at home mostly believed that there are harmful people on the Internet (80.2%), whereas, the participants, who do not have internet access at home, less often believed that there are harmful people on the Internet (74.3%).

It was also observed that 73.5% of the participants, who know the source of help when they faced a threat on the Internet, were the ones who have internet access at home, whereas, 63.1% of the participants, who know the source of help when they faced a threat on the Internet were the ones who do not have internet access at their home. This difference was significant in terms of the availability of the internet access at home [$\chi^2(2)=28.06$ p=000, p<.05]. This finding yielded that the students, who have internet access at home, know what to do when they faced a threat on the Internet and they felt more confident when it is compared to the ones who do not have internet access at home. The idea that "Internet improves computer literacy" was significant on behalf of having Internet access at home [$\chi^2(2)=28.74$ p=000, p<.05]. It was observed that most of the participants (72.6%), who declared that their computer literacy was improved, have Internet access at their home. All of these findings revealed that the Internet awareness of the participants, who have internet access at home, was higher than that of those who do not, and their awareness was particularly high in terms of "knowing what to do when they faced a threat on the Internet" and "improving their computer literacy".

Internet use location

With reference to the location of Internet use, it was found that there was a significant relationship between the location of Internet use and the participants' opinion that there are harmful content on the Internet [$\chi^2(10)=19.14$ p=038, p<.05]. The analysis of the data revealed that most of the participants used the Internet either at home (71.7%) or at an Internet cafe (67.3%). The opinions of the participants, who believed that there are harmful people on the Internet was significant in terms of having Internet at their home [$\chi^2(10)=24.86$ p=006, p<.05], that is, 80.3% of those who share this opinion have Internet access at their home. Similarly, it was found that there was a significant relationship between the location of Internet use and knowing the source of help when they faced a threat on the Internet [$\chi^2(10)=58.87$ p=000, p<.05], that is, 73.6% of the participants, who have Internet access at home, believed that they know the source of help when they faced a threat on the Internet. Thus, the awareness of the participants who have Internet access at home were higher than the participants who do not have Internet access at home, in terms of discerning that there might be harmful content and people on the Internet as well as knowing the source of help when they faced a threat on the Internet.

With reference to the location of Internet access, it was found that there was a significant difference in the opinion of the participants concerning the idea that Internet helps learning out-of-school [$\chi^2(10)=44.20$ p=000, p<.05]. That is 68.3% of the participants, who believe that Internet helps learning out-of-school, have Internet access at their home. Similarly, it was found that there was a significant difference in the opinion of the

participants regarding the idea that Internet helps to develop computer literacy [$\chi^2(10)=33.10$ p=000, p<.05], since, 72.5% of the participants, who believe that Internet helps to develop computer literacy, have Internet access at their home. Likewise, 71.7% of the participants, who have internet access at their home, stated that they were satisfied with the publication of their homework on the Internet. This finding was also significant [$\chi^2(10)$ =12.62 p=245, p<.05]. That is, there was a significant relationship between the location of the Internet access and Internet awareness, which in turn might be interpreted as the Internet awareness of the participants, who have Internet access at home, was higher than that of other participants who do not have.

Purpose of the Internet use

With reference to the purpose of the Internet use, there were significant difference among the opinions of the participants in terms of using internet for playing game [$\chi^2(2)=19.07$ p=000, p<.05]; for listening to Music [$\chi^2(2)=41.96$ p=000, p <.05]; for checking/reading e-mails [$\chi^2(2)=54.27$ p=000, p<.05]; for chatting [$\chi^2(2)=113.12$ p=000, p<.05]; for reading News [$\chi^2(2)=19.84$ p=000, p<.05] and for watching films [$\chi^2(2)=21.40$ p=000, p<.05]. It was found that most of the participants, who regarded Internet as a right for themselves, used the Internet for the purpose of playing game (81.7%); listening to music (83.6%); checking/reading e-mails (89.3%); chatting (87.2%); reading News (86.6%) and watching films (83.8%). Thus, it can be claimed that the majority of the participants, who regarded Internet as a right for themselves, used the Internet for fun. It can be claimed that these participants might associate the right of Internet access with the right of access for fun instead of accessing the information on the Internet. In terms of the gender of the participants, who regarded Internet as a right, most of the male participants generally used the Internet for the purpose of playing game (86.6%); checking/reading e-mails (30.8%); chatting (58.7%); reading News (22.6%) and watching films (48.0%); whereas, the majority of the female participants used the Internet only for the purpose of listening to music (67.8%).

It was found that there were significant differences in the purposes of the participants who inquire more information on the Internet related to their subjects; thus, most of the participants who inquire more information on the Internet related to their subjects, used Internet for the purpose of playing game [$\chi^2(2)=32.36$ p= 000, p<.05]; doing homework [$\chi^2(2)=22.08$ p=000, p<.05]; checking/reading e-mails [$\chi^2(2)=10.23$ p=006, p<.05]; chat [$\chi^2(2)=6.01$ p=049, p<.05] and reading News [$\chi^2(2)=18.37$ p=000, p<.05]. Thus, a good number of the participants, who inquire more information on the Internet related to their subjects, used Internet for the purpose of playing game (87.3%); doing homework (85.9%); checking/reading e-mails (88.3%); chatting (86.4%) and reading News (91.3). Similarly, concerning the purposes of using Internet, it was found that there were significant differences in terms of the purposes of the participants, who believed that Internet improves the computer literacy; playing game [$\chi^2(2)=30.09$ p=000, p<.05], listening to music [$\chi^2(2)=58.02$ p=000, p<.05], checking/reading e-mails [$\chi^2(2)=52.13$ p=000, p<.05], chat [$\chi^2(2)=74.87$ p=000, p<.05], reading News [$\chi^2(2)=17.00$ p=000, p<.05] and watching film [$\chi^2(2)=42.25$ p=000, p<.05]. That is, a majority of the participants, who believed that Internet improves the computer literacy, used internet for playing game (72.5%); listening to music (75%); checking/reading e-mails (80.3%); chatting (76.7%); reading News (77.5%) and watching films (76.3%).

The findings indicated that there were significant differences in terms of the purposes of the Internet use among the participants who believed that Internet eases learning out-of-school, and the significance of these variables were as follows; listening to music [$\chi^2(2)=21.91$ p=000, p<.05], checking/reading e-mails[$\chi^2(2)=63.58$ p=000, p<.05], chatting [$\chi^2(2)=26.86$ p=000, p<.05], reading News [$\chi^2(2)=19.79$ p=000, p<.05] and watching film [$\chi^2(2)=26.29$ p=000, p<.05]. Thus, a great deal of participants, who believed that Internet eases learning out-of-school, used the Internet for listening to music (68%); checking/reading e-mails (77.3%), chatting (69.5%), reading News (73.7%) and watching film (70.5%). These findings might indicate that these students make use of Internet out-of-school as well.

Concerning the variable that knowing the source of help when they faced a threat on the Internet, the participants' purposes of using internet showed significant differences in terms of using internet for listening to music [$\chi^2(2)=8.00$ p=018, p<.05], doing homework [$\chi^2(2)=8.17$ p=017, p<.05] and checking/reading e-mails [$\chi^2(2)=14.86$ p=001, p<.05]. In other words, most of the participants, who stated that they know the source of help when they faced a threat on the Internet, used it for the purposes of listening to music (72.4%), checking/reading e-mails (71.2%), and doing homework (71.2%). Similarly, there were significant differences among the Internet use purposes of the participants, who inquire more information on the Internet, especially in the purposes of using Internet for reading News [$\chi^2(2)=6.75$ p= 034, p<.05] and for watching films [$\chi^2(2)=10.12$ p=000, p<.05]. The findings also revealed that 96.9 % of the participants who believed that there might be harmful content on the Internet and 97% of the participants, who believed that there might be harmful people on the Internet, used the Internet for the purposes of doing homework. In this respect, the difference among the opinions of the participants were significant [$\chi^2(2)=19.86$ p=000, p<.05; $\chi^2(2)=41.44$ p=000, p<.05]. Likewise, 44.7% of the participants who used the Internet for the purpose of watching films were happy to see their homework on the Internet. In this respect, the difference in the opinions of the participants was significant [$\chi^2(2)=14.10$ p=001, p<.05]. Concerning these findings, especially in terms of Internet use purposes, it can be claimed that the Internet awareness of the participants who used it for the purpose of fun was higher than that of other participants.

Mother occupation

The analysis of the data revealed that the opinion of the participants who believed that there are harmful content on the Internet showed significant difference in terms of the occupation of their mother [$\chi^2(10)=21.29$ p=019, p<.05]; that is, the mothers of a great deal of the participants (72.5%) who believed that there are harmful content on the Internet were housewives. Similarly, concerning the occupations of the mothers, there was a significant difference among the opinions of the participants who believed that Internet provides learning out-of-school [$\chi^2(10)=34.53$ p=000, p<.05]. That is, an important proportion of the mothers (63.1%) of the participants, who believed that Internet provides learning out-of-school, were housewives.

Likewise, concerning the occupations of the mothers, it was found that there was a significant difference among the opinions of the participants who believed that Internet improves the computer literacy [$\chi^2(10)=28.07$ p=002, p<.05]. That is, 67.9% of the mothers of the participants who believed that Internet improves the computer literacy were housewives. Again, concerning the occupations of the mothers, it was found that there was a significant difference among the opinions of the participants who believed that they know the source of help when they faced a threat on the Internet [$\chi^2(10)=35.66$ p=000, p<.05]. That is, a majority (68.8%) of the mothers of those participants were housewives. It was also found that 67.5% of the participants, whose mother were housewife (71.5%), used the Internet at their home. In this respect, it can be claimed that there was a significant relationship between the occupation of the mothers of the participants and their Internet awareness. Especially, the awareness of the participants whose mothers were housewives was higher than that of other participants whose mothers have different occupations. Thus, it can be claimed that the mothers who are housewives concern more about their children's Internet use than that of other mothers who have different occupations.

Father occupation

It was found that a majority (73.3%) of the occupations of the fathers of the participants, who believed that there is harmful content on the Internet, were labors. In this respect, the differences among the opinions of the participants were significant [$\chi^2(10)=41.95$ p=000, p<.05]. Similarly, concerning the occupation of the fathers, the opinions of the participants who believed that Internet provides learning out-of-school was significant [$\chi^2(10)=27.56$ p=002, p<.05]. That is, a great deal of the fathers of the participants who believed that Internet provides learning out-of-school was civil servants (71.1%). It was also observed that concerning the occupations of the fathers, there was a significant difference among the opinions of the participants who believed that Internet improves the computer literacy [$\chi^2(10)=27.47$ p=002, p<.05]. The occupations of the greater part of

the fathers of the participants who believed that Internet improves the computer literacy were tradesmen (70%).

Likewise, concerning the occupations of the fathers, the findings revealed that there was a significant difference among the opinions of the participants who believed that there are harmful people on the Internet [$\chi^2(10)=27.56$ p=002, p<.05]. A large amount of the fathers of these students were tradesmen (74.9%). It was observed that, the occupations of the fathers of the participants who stated that they have Internet access at their home were civil servant (86.7%), laborers (71.5%) and tradesmen (70.2%). Thus, with reference to these findings, it can be claimed that the Internet awareness of the participants whose fathers were civil servants, laborers and tradesmen were higher than that of other participants whose fathers have different occupations.

Mother education

It was found that the mothers of the most of the participants, who believed that there are harmful people on the Internet, were the graduates of a university. This difference was significant in terms of the education of the mothers of the participants [$\chi^2(6)=34.72$ p=000, p<.05]. Likewise, the education background of the mothers of the participants who believed that Internet provides learning out-of -school was significant [$\chi^2(6)=58.13$ p=000, p<.05]. The majority of the mothers (75.3%) of the participants who believed that Internet provides learning out-of-school were university graduates. Similarly, concerning the education of the mothers of the participants, it was also found that the difference among the opinions of the participants who believe that Internet improves computer literacy was significant [$\chi^2(6)=65.94$ p=000, p<.05]. Thus, the majority (80.2%) of the mothers of the participants, who believed that Internet improves computer literacy, were also university graduates.

Concerning the education of the mothers of the participants, it was found that there was significant relationship between the opinions of the participants regarding the Internet as a right and inquiring more information related to their subjects on the Internet [$\chi^2(6)=90.31$ p=000, p<.05; $\chi^2(6)=10.38$ p=110, p<.05]. A great deal (86.6%) of the mothers of the participants, who regarded Internet as a right for themselves and the majority (87.7%) of the mothers of the participants, who inquired more information related to their subjects on the Internet, were university graduates. In this respect, it can be claimed that the Internet awareness of the participants whose mothers were university graduates were higher than that of other participants whose mothers have different education backgrounds. Thus, it can be also claimed that the Internet awareness of the participants are getting higher concerning the education backgrounds of their mothers.

Father education

The findings revealed a significant difference with reference to the educational background of the fathers of the participants, who regarded Internet access as a right for themselves [$\chi^2(6)=100.00$ p=000, p<.05]. It was found that 83.6% of the fathers of the participants, who regarded Internet access as a right for themselves, were university graduates. Similarly, 76.6% of the fathers of the participants, who stated that they know the source of help when they faced a threat on the Internet, were university graduates. In this respect, this difference among the opinions of the participants was significant in terms of the educational background of their fathers [$\chi^2(6)=31.86$ p=000, p<.05].

Likewise, concerning the educational backgrounds of the fathers, there was a significant difference among the opinions of the participants, who believe that there are harmful people on the Internet [$\chi^2(6)=16.48$ p=011, p<.05]. That is, 82% of the fathers of the participants, who believed that there are harmful people on the Internet, were university graduates. Similarly, it was observed that 71.1% of the fathers of the participants, who believed that Internet provides learning out-of-school, were university graduates. This difference was significant [$\chi^2(6)=49.88$ p=000, p<.05]. In the same way, 76% of the fathers of the participants, who believe that Internet improves computer literacy, were university graduates. This difference was also significant [$\chi^2(6)=62.58$ p=000, p<.05]. With reference to these findings, it can be claimed that the Internet awareness of

the students, whose fathers were university graduates, were higher than that of other participants, whose fathers have different educational background.

DISCUSSION

The Internet awareness of the primary school students (4 to 8 grades) were examined with reference to some variables. The findings of the study revealed that there were significant relationships between the opinions of the primary school students about their Internet awareness and the independent variables such as grade levels, gender, having Internet access at home, the location of Internet access, the purpose of the Internet use, the occupations of the parents, and the educational background of the parents.

With reference to the gender of the participants, it was found that the male students have higher Internet awareness concerning the favorable sides of the Internet, which were providing learning out-of the school, improving computer literacy and inquiring more information related to their course subjects. The Internet awareness of female students, on the other hand, were higher than that of the boys concerning the unfavorable sides of the Internet such as there might be harmful people and harmful content on the Internet. This finding can be explicated with the fact that male students use Internet more than female students do. Thus, several studies also revealed that the information technology use habits of people show differences with reference to their genders. Thus, it was also found that male users were highly keen on the information technologies (Kraut et al., 1998; Odell, Korgen & Schumacher, 2000; Schumacher & Morahan-Martin, 2001). Similarly, Cone (2001) stated that the schools and society usually encourage male students more than they encourage female students in terms of their computer use experiences (cited in, Madell & Muncer, 2004).

With reference to the grade levels of the participants, it was found that Internet awareness of the students show significant differences. For instance, it was observed that, when the grade levels of the participants become higher, the awareness of the participants, who considered Internet access as a right for themselves, ~~was~~ increased. On the other hand, when the grade levels of the participants become higher, the awareness of the participants, who believed that there might be harmful people on the Internet, decreased in the same way. The participants, who supported this idea most, were the eighth graders (14 years old). This finding can be explicated with the fact that Internet necessity, Internet awareness and the role of the Internet increased parallel with the increase in the ages of the teenagers. Furthermore, it was also confirmed by other studies that older children use Internet more than that of the younger children do (Turow & Nir, 2000) and older children are more aware of the positive and negative aspects of the Internet (The Council of Internet, 2002). It was observed that the lower grades were wiser in terms of knowing the source of help when they faced a threat on Internet and they were more satisfied with the publication of their homework on Internet. There might be several reasons behind expressing such opinions among the lower grades. First of all, the younger children usually ask for help whenever they faced a threat in any circumstances. Secondly, it is a fact that younger children were less experienced on using Internet than that of the older children do. Furthermore, it was stated by several researchers that the publication of the children's works on the Web increase their motivation (Dixon & Black, 1996; Schofield & Davidson, 2002). In this respect, the lower grades might be more satisfied with the publication of their homework on the Internet, which in turn, might provide a positive attitude among the lower grades towards Internet use.

It was observed that both the fourth graders (10 year olds) and eighth graders (14 year olds) shared almost the same opinions with some of the items in the questionnaire. For instance, both the fourth and eighth graders were the least agreed participants who believe that there might be harmful content on the Internet. This finding can be explicated with the experiences of participants on their Internet use. Since the fourth graders were not well-experienced Internet users, they might not have an idea about such circumstances or since they might not experienced such an unwelcomed threat on the Internet yet; they might state their opinions in this way. On the other hand, since the eighth graders were more experienced Internet users than that of other

grade levels and since they might experience with such circumstances on the Internet before, they might state their opinions in that way.

In terms of the location of Internet use of the participants, the Internet awareness of the participants, who have Internet access at their home, were higher in relation with some of the variables such as; knowing that there might be harmful people and harmful content on the Internet, knowing the source of help when they faced a threat on the Internet, thinking that Internet provides learning out-of-school, and thinking that Internet improves skills related to computer use. This can be explicated with the fact that children believe that Internet access at home is safer than that of accessing it in any other location. Similarly, Odabaşı (2005) found that parents believe that Internet access at home is safer for their children. However, Cranmer, Selwyn and Potter's (2009) study revealed that the children, who participated to their study, were not aware of the fact that there might be cyber-stalking, games with harmful content, and commercial exploitations on the Internet.

With reference to the purpose of the Internet use of the participants, it was observed that participants who regarded the Internet access as a right for themselves used the Internet mostly for fun. Regarding this finding, it can be claimed that these participants might associate the right of the Internet access with the right of access for fun instead of accessing to the information on the Internet.

In terms of the genders of the participants, when the opinions of the participants, who regarded the Internet access as a right for themselves compared with their purpose of Internet use, it was found that male students used the Internet mostly for playing games (86.6%), for checking/reading e-mails (30.8%), for chatting (58.7%), for reading news (22.6%) and for watching films (48.0%). On the other hand, it was found that the female students mostly used Internet for the purposes of listening to music (67.8%). In this respect, the finding of Aslanidou and Menexes' (2008) study is considerable since they found that male students used Internet mostly for playing games. Similarly, Cranmer, Selwyn & Potter (2009) found that children use home internet access mostly for playing games and reading/checking e-mails. It was found that the most (87.3%) of the participants, who inquire more information on the Internet related to their course subject, and the majority (72.5%) of the participants, who believe that Internet improves their skills on computer use, used the Internet for the purposes of playing games. Likewise, the studies conducted in the Turkish context (Ersoy & Yaşar, 2003; Ersoy & Türkkan, 2009; Orhan & Akkoyunlu, 2004) revealed that the primary school students mostly used the Internet for the purposes of playing games. Similarly, Aslanidou and Menexes's (2008) study, which was conducted in the Greece context, revealed that the students, who are 12 to 18 years old, mostly used Internet for the purposes of fun and communication.

The findings of the present study revealed that Internet awareness of the participants whose mothers were housewives were higher than that of the participants whose mothers have different occupations. That is, the participants whose mothers were housewives have a higher Internet awareness than that of other participants whose mothers have different occupations concerning the variables such as there might be harmful content for children on Internet, Internet provides learning out-of-school, Internet improves the computer literacy, and knowing the source of help when they faced a threat on the Internet. In this respect, it can be claimed that the mothers, who are housewives, concern more about their children's use of Internet habits than that of other mothers who have different occupations.

With reference to the occupations of the fathers of the participants, the participants, whose fathers were laborers, believed that there might be harmful content on the Internet, whereas, the participants, whose fathers were civil servants, mostly believed that internet provides learning out-of-school. On the other hand, the participants, whose fathers were tradesmen, mostly believed that Internet improves their skills on computer use and there might be harmful people on the Internet. In this respect, it can be claimed that the awareness of the participants, whose fathers were tradesmen, civil servants and laborers, is higher than that of other participants whose fathers have different occupations. In connection with the educational background of

the parents, it was found that Internet awareness of the participants, whose parents were university graduates, was higher than that of other participants, whose parents were graduates of other schools. In this case, it can be claimed that the Internet awareness of the parents increase when their educational backgrounds are higher. The studies in the literature (Vekiri, 2010; Vryzas & Tsitouridou, 2002) also indicated that the educational backgrounds of the parents play an important role in the use of the information technologies by their children.
Concerning the findings of the present study, some suggestions were offered in the following section. First of all, in order to increase the Internet awareness of the female students, some school or home based activities which lead them to familiarize with the constructive features of the Internet can be organized. Additionally, both male and female students might be informed about the constructive features of the Internet and all of the students should be encouraged to make use of such characteristics of the Internet. It was observed that the Internet awareness of the students increased concerning the educational backgrounds of their parents. Therefore, it might be very facilitative when the parents are trained, informed and collaborated on the effective and efficient use of the Internet by their children. Especially, the mothers, who were housewives, might be trained on the Internet awareness issues. As for suggestions for further studies, researchers might conduct qualitative studies with a limited number of the students through observation and interview techniques.

BIODATA AND CONTACT ADDRESS OF AUTHOR

Ali ERSOY is a assistant professor of Primary Education at Faculty of Education in Anadolu University, Eskisehir/Turkey. His research interests include using technology in elementary education, internet and children, teacher education, and qualitative research methods.

Assist. Prof. Dr. Ali ERSOY
Faculty of Education
Anadolu University, Eskisehir,TURKEY
Phone: +90 (222) 335 3580 / 3550
E mail: alersoy@anadolu.edu.tr

REFERENCES

Aslanidou, S., & Menexes, G. (2008). Youth and the Internet: Uses and practies in the home. *Computers & Education,* 51, 1375-1391.

Cranmer, S., Selwyn, S., & Potter, J. (2009). Exploring primary pupils' experiences and understandings of 'e-safety'. *Education and Infirmation Technologies, 14(2),* 127-142.

Day, J., Janus, A., & Davis, J. (2005). *Computer and internet use in the United States: 2003.* Wahington, DC: U.S. Census Bureau.

Dixon, S., & Black, L. (1996). Vocal point: A collaborative, student run online newspaper. In E. J. Valauskas & M. Ertel (Eds.), *The Internet for teachers and school library media specialist: Today's appliactions tomorrow's prospects* (pp. 147-158). New York: Neal-Schuman Publishers, Inc.

Ersoy, A., & Yaşar, Ş. (2003). İlköğretim 4. ve 5. sınıf öğrencilerinin internet kullanma durumları [The Internet using situations of elementary students of 4th and 5th grades]. *Journal of Turkish Educational Sciences, 1,* 401-425.

Ersoy, A., & Türkkan, B. (2009). Perceptions about Internet in elementary school children's drawings. *Elementary Education Online,* 8(1), 57-73, [Online]: http://ilkogretim-online.org.tr

Hundley, H. L., & Shyles, L. (2010). US teenagers' perceptions and awareness of digital technology: a focus group approach. *New Media & Society,* 12(3), 417–433.

Hick, S. & Halpin, E. (2001). Children's rights and internet. *Annals,* 575, 56-70.

Kiili, C., Laurinen, L., & Marttunen, M. (2008). Students evaluating ınternet sources: from versatile evaluators to uncritical readers. *Journal of Educational Computing Research, 39(1),* 75-95.

Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, *53*, 1017-1031.

Livingstone, S. (2003). Children's use of the internet: Reflections on the emerging research agenda. *New Media & Society, 5(2),* 147–166.

Livingstone, S., & Bober, M. (2004). *UK children go online: Surveying the experiences of young people and their parents.* London: LSE Report. Available from. www.children-go-online.net

Madell, D., & Muncer., S. (2004). Gender differences in the use of the Internet by English secondary school children. *Social Psychology of Education* 7, 229–251.

Odabaşı, H. F. (2005). Parent's views on internet use. *The Turkish Online Journal of Educational Technology,* 4(1), 38-45. Avaliable from. http://www.tojet.net/volumes/v4i1.pdf

Odell, P. M., Korgen, K. O., & Schumacher, P. (2000). Internet use among female and male college students. *CyberPsychology & Behavior*, *3*, 855-862.

Orhan, F., &. Akkoyunlu, B. (2004). İlköğretim öğrencilerinin internet kullanımları üzerine bir çalışma. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi,* 26, 107-116.

Schofield, J. W., & Davidosn, A. L. (2002). *Bringing the Internet to school: Lessons from an urban district.* San Francisco, CA: Jossey Bass.

Schumacher, P., & Morahan-Martin, J. (2001). Gender, internet and computer attitudes and experiences. *Computers in Human Behavior*, *17*, 95-110.

Shukor, S. A. (2006). Protecting children's rights in the internet: Challenges apreliminary study based on the Malasian experience. Avaliable from. http://www.bileta.ac.uk/document%20Library/1/protecting%20children's%20right%20in%20the520internet%20the%20challenges.pdf

The Concil of Internet. (2002). Gençlerin Internet kullanımı: Çalıştay raporu. [Young peoples' Internet use: Workshop Report]. Avaliable from. http://kurul.inet-tr.org.tr/calistay/

The Ministry of National Education [MoNE]. (2008). National education statistics: Formal education 2007-2008. Avaliable from. http://sgb.meb.gov.tr/istatistik/meb_istatistikleri_orgun_egitim_2007_2008.pdf

The Ministry of National Education [MoNE]. (2010). MEB internete erişim projesi. [MoNE Internet Access Project]. Avaliable from. http://www.meb.gov.tr/ADSL/adsl_index.html

Turkish Statistical Institute [TSI]. (2010). Hanehalkı bilişim teknolojileri kullanım anketi 2007-2008-2009. [ICT Usage Survey in Households and Individuals 2007-2008-2009]. Avaliable from. htpp://www.tuik.gov.tr

Turow, J. (2001). Privacy policies on children's websites: Do they play by the rules? *The Annenberg Public Policy Center.* Avaliable from. http://www.appcpenn.org/ internet/family/privacyreport.pdf

Turow, J., & Nir, L. (2000). *The Internet and the family 2000: The view from parents the view from kids*. Philadelphia: Annenberg Public Policy Center.

Valkenburg, P. M., & Soeters, K. E. (2001). Children's positive and negative experiences with the internet: An exploratory survey. *Communication Research, 28(5),* 652-675.

Varnhagen; C. K. (2007). Children and the Internet. In. J. Gackenbach (ed.). Psychology and the Internet: Intrapersonal, Interpersonal, and Transpersonal Implications (pp.37-54). (Second Edition). Academic Press.

Valcke, M., Schellens, T., Van Keer, H., & Gerarts, M. (2007). Primary school children's safe and unsafe use of the Internet at home and at school: An exploratory study. *Computers in Human Behavior,* 23, 2838-2850.

Vekiri, I. (2010). Socioeconomic differences in elementary students' ICT beliefs and out-of-school experiences. *Computers & Education,* 54, 941-950.

Vryzas, K., & Tsitouridou, M. (2002). Childrens and computers: Greek parents expectations. *Educational Media International,* 39(3-4), 285-297.

Wishart, J. (2004). Internet safety in emerging educational contexts. *Computers & Education,* 43, 193-204.

Wishart, J. M., Oades, C. E., & Morris, M. (2007). Using online role play to teach Internet awareness. *Computers & Education,* 48, 460-473.