Mobile Internet Experiences of the Children in Turkey and European Countries: A Comparative Analysis of Internet Access, Use, Activities, Skills and Risks*

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ARTICLE INFO	ABSTRACT
	Purpose: This study aims to examine the current state of mobile Internet experience of the children in Turkey and to compare the Internet experiences of the children in Turkey to the children living in seven European countries included in the Net Children Go Mobile (NCGM) project. **Research Methods:** In this study, a descriptive research design was employed and the participants consisted of 784 children between the ages of 9 and 16 from 12 different regions. **Findings:** Results revealed that the ratio of Turkish children having Internet access in their own bedrooms and outside and also the ratio of them owning mobile devices, such as smartphones and tablets, is above the European average.

It was seen that Turkish and European children used the Internet mostly for performing leisure and communicative activities. Although Turkish children's Internet use skills seemed to above the European average, it was seen that their skills towards safe Internet browsing like filtering unwanted content, blocking pop-up windows lacked behind their European counterparts. Thus, it was revealed that Turkish children were facing more Internet risks compared to the children in Europe.

Implications for Research and Practice: Future studies can utilize more detailed evaluation methods, such as performance tasks to assess the children's mobile device and Internet use. Researchers can also design applications and activities that aim to redirect the children's attention from using the Internet for entertainment and communication purposes to using it for research and study and then evaluate the effectiveness of the designs.

Introduction

The number of Internet users has been increasing rapidly all over the world. Likewise, as of the end of 2019, the number of active Internet users in Turkey has reached to 59.3 million, which is approximately 72% of the country's population. Consequently, the country has exceeded the world average of active Internet users and ranked 31st among the other countries (We Are Social [WAS], 2019). The role of the ever-growing variety of mobile devices in the increase of Internet use in the World and Turkey cannot be denied. Especially the developments in mobile broadband technologies (e.g., 3G and 4G) have triggered the individuals' interest in and demand for mobile Internet (International Telecommunication Union [ITU], 2015; WAS, 2019).

As mobile devices and mobile Internet access continue to take more parts in our daily lives, they influence the children's lives to greater extents (Mascheroni & Ólafsson, 2014). Today's children referred to as digital natives by Prensky (2001), become acquainted with the Internet at a very early age and use online applications through touch-screen mobile devices, such as smartphones and tablets (Chaudron, 2015; Croll, 2016). Compared to desktop and laptop computers, mobile devices not only give children mobility and autonomy (Haudittai & Hinnant, 2008; Park, 2014), they also integrate online activities into everyday events children participate in (Barbovschi, O'Neill, Velicu, & Mascheroni, 2014; Livingstone, Mascheroni, & Staksrud, 2015). This allows children to spend more time with their friends and socialize, realize themselves through online experiences, and have fun (Vincent, 2015). Mobile Internet offers children the opportunities to read books and magazines whenever they want, find quick answers to things they are curious about, and study on their own (Eren, 2015; Vincent, 2015).

While providing facilities, such as flexibility of time and space and new communication environments, the children's widespread use of mobile devices for Internet access poses new risks (An, Morgenlander, & Seplocha, 2014). In the relatively conventional computer-mediated Internet access scenarios, children may isolate themselves from the social environment at fixed physical locations. On the other hand, mobile Internet access allows them to do so virtually anywhere, independent of their physical location (Kelleci, 2008; Net Children Go Mobile [NCGM], 2014). In addition to this, the studies reported that children with smartphones encounter online risks more often. Thus, they need new sets of skills to safely use the Internet (Mascheroni & Ólafsson, 2014; Smith et al., 2008). Not surprisingly, the children's use of mobile Internet is of considerable concern to parents, and such concerns may lead to arguments in the household (Genc, 2014; Kelleci, 2008; NCGM, 2014). According to a review of 175 studies conducted between 2001 and 2012 on the use of mobile Internet, mobile Internet has not reached the peak yet, even though it becomes increasingly common every passing day (Gerpott & Thomas, 2014). In fact, as of 2019, it is seen that one out of every two people in the world is a mobile Internet user (WAS, 2019). As a result, the children's negative experiences with mobile Internet may evolve into more complicated ones in the future. Hence, future studies should focus on identifying emerging risks, investigating them through various lenses, and providing guidance about possible new skills for safe mobile Internet use. While various international

initiatives conduct studies on the children's experiences with mobile Internet (e.g., the PEW Research Center in the US and the NCGM project group in Europe), in Turkey, there is a lack of small as well as large-scale studies investigating mobile Internet experiences of children aged 9-16 years. This study aims to present the current state of mobile Internet experiences of the children in Turkey and provide an opportunity to compare it to mobile Internet experiences of children in the seven European countries. In line with this purpose, the following research questions were formulated: In Turkey and seven European countries,

1. What are the levels of children's mobile Internet access and use?

2. What are the levels of children's skills regarding the mobile devices and Internet use?

3. What kinds of activities do children engage in online and what are their levels of engagement?

Method

Research Design

As this study aims to examine the mobile Internet experiences of Turkish children by collecting data from a large group, the descriptive survey method was chosen as the main methodological approach. This method is widely used in educational research and its main purpose is to identify and depict the current situation of a phenomenon (Creswell, 2012; Johnson & Christensen, 2004).

Research Sample

The stratified sampling method was used in participant selection to generate a representative sample of Turkish children and to comply with the methodology of the survey developed in the NCGM project. In this context, 784 9-to-16-years-old children from the 12 regions identified in the Turkish Nomenclature of Territorial Units for Statistics (NUTS) (TURKSTAT, 2005) were selected as participants. Each age level (9,10,11,12,13,14,15,16) and gender had an equal number of participants. Figure 1 summarizes the sampling approach employed in the selection of provinces, schools and children.
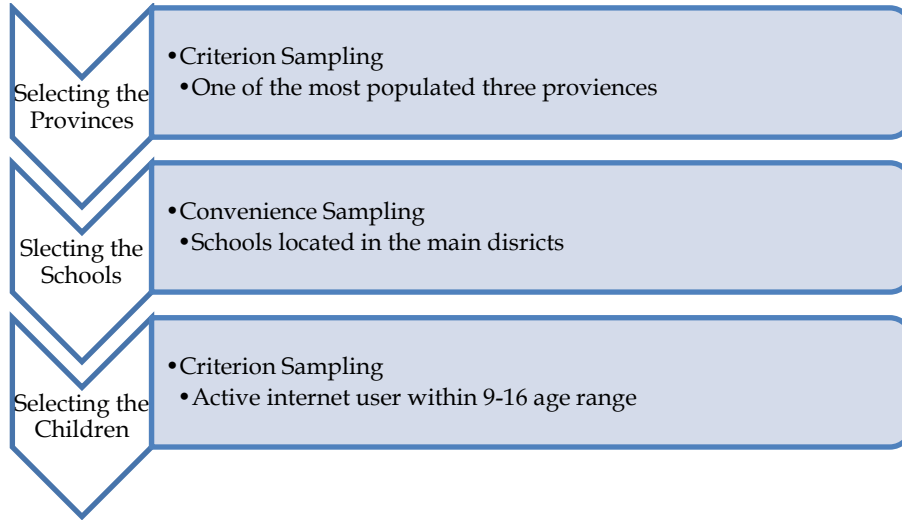
Figure 1. *Sampling Procedure*

Data Collection Tool

In this study, a questionnaire developed by the EU Kids Online (EUKO) study group within the scoped NCGM project was used. The EUKO study group consisted of 95 experienced researchers working in national project teams in 24 European countries, including Turkey (Livingstone, Haddon, Görzig, & Ólafsson, 2011). NCGM project was conducted in Denmark, Ireland, Italia, Romania, England, Portuguese and Belgium between 2012 and 2014. The survey and survey data of this project are available to everyone. To adapt the NCGM Questionnaire to Turkish, the present study employed Seker and Gencdogan's (2006) questionnaire adaptation procedure as listed below:

- Independent translations of the questionnaire to the target language (Turkish) by two language experts

- Comparison of the translations

- Back translation to the original language (Turkish into English)

- Review of the translated questionnaire by target language experts

Once the initial draft of the Turkish adaptation was generated, two experts from the Turkish team of the EUKO project group reviewed the questionnaire and provided feedback to guide revisions. After the evaluation of field experts, cognitive tests were conducted with eight children between ages 9 and 16, including one child from each age group, and the questionnaire items were examined and reorganized concerning understanding, remembering, judging and responding aspects. The pilot study has critical importance concerning the preliminary checking of the problems in the questionnaire before the actual implementation of the questionnaire (Buyukozturk, 2005; Teijlingen & Hundley, 2001). Thus, a pilot study was conducted with 80 children,

including five boys and five girls from each age group between ages ranging from 9 to 16. After conducting the cognitive testing and pilot study and receiving the Ministry of National Education's (MoNE's) permit for data collection, the final version of the questionnaire was established with 53 question roots.

Data Collection and Analysis

The original questionnaire was applied to 500 children in each of the seven European countries. In this study, the Turkish adaptation was applied to 784 children in Turkey. The data from Turkey were collected between April and June 2015. Data from Denmark, Ireland, Italy, Romania, and the UK were collected between May and June 2013, while data from Portugal and Belgium were collected between February and March 2014. Therefore, the data collection periods should be considered when comparing children's mobile Internet experiences across the countries.

After acquiring MoNE's permission to conduct this research, the researchers applied the questionnaire in the 12 selected provinces. The data collected through paper-and-pencil forms, then, were transferred to the SPSS program to calculate descriptive statistics, such as percentage, frequency, and arithmetic mean.

Results

The findings of this study were presented according to the research question investigating the children's mobile Internet experiences concerning access and use, activities, skills, and risks.

Access and Use

In this section, to investigate the multiple dimensions of the Internet access and use levels of children, the findings were organized into three categories, namely the place of use, the frequency of use and the device used.
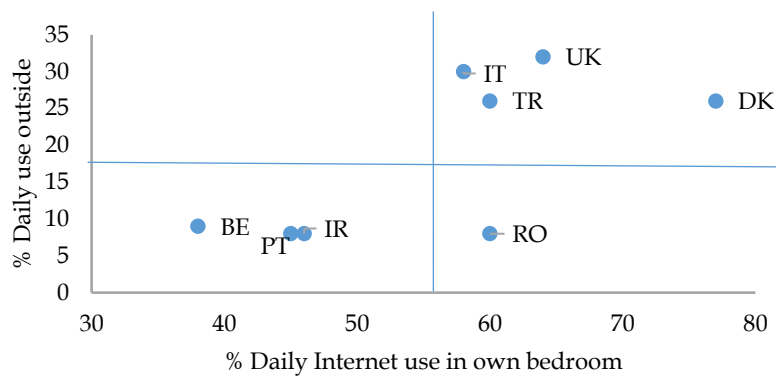
Places Where Children Access the Internet

When examining the places where children had access to the Internet, organizing the findings in two overarching categories as in their own bedrooms and outside (e.g., school and other places away from home) may reveal the flexibility of the Internet use by children. In this respect, Figure 2 presents the findings regarding the places where children have access to the Internet on a daily basis. In Figure 2 and the following figures, Europe refers to the average of seven European countries participated in the NCGM.
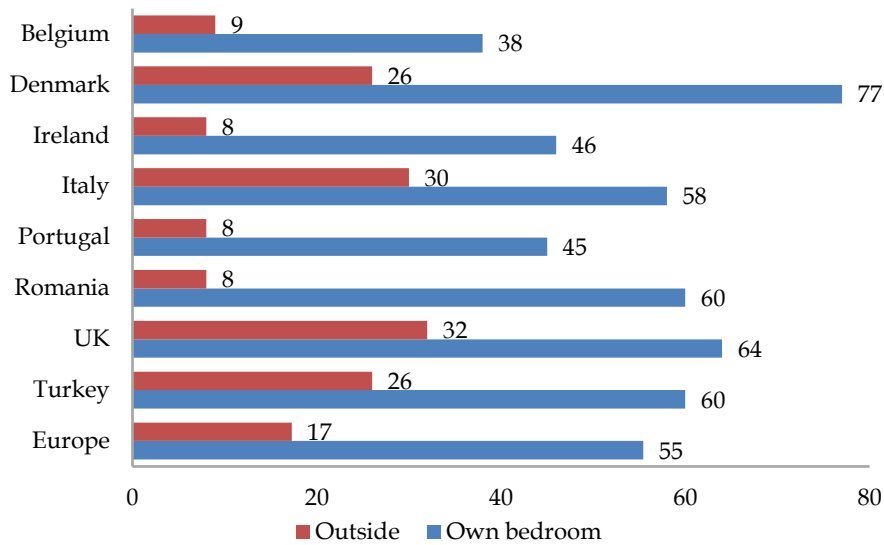
**Figure 2.** *Places Where Children have Access to the Internet*

In Turkey, the UK, Italy, and Denmark, the percentages of the children who had access to the Internet in their own bedrooms and outside were above the European average, while the percentages for Belgium, Ireland and Portugal were below the European average. In Romania, the gap between children's access to the Internet in their own bedrooms and outside was remarkably wider than the other countries. Besides, as Figure 3 indicates, the children in Turkey, the UK, Italy, and Denmark are likely to be more autonomous in their Internet use, considering the above-average use patterns.

**Figure 3.** *Children's Internet Autonomy of Use*

Devices that Children Use to Access the Internet

The children having Internet access both within their own bedrooms and the outside indicates mobile device ownerships, such as smartphones and tablets. In this respect, the results of the analysis of children having Internet-enabled devices have been presented in Figure 4.
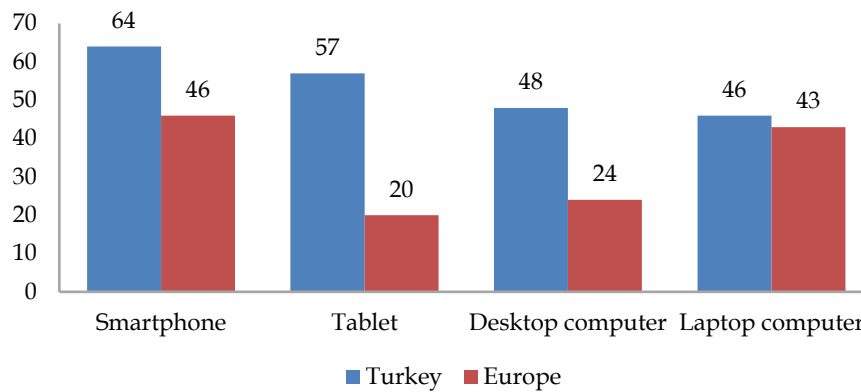
Figure 4. *Percentages of the Internet-Enabled Device Ownership*

As seen in Figure 4, the proportion of children in Turkey with mobile devices, such as smartphones and tablets, was also above the European average. It is especially remarkable that the percentage of Turkish children having tablets is almost three times the European average. Nonetheless, as seen in Figure 5, Turkish children first meet the Internet and own their first smartphones at almost the same ages as their European peers.
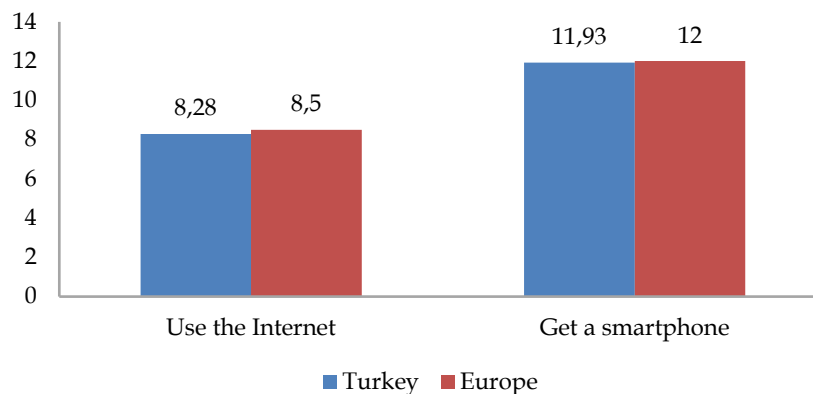
Figure 5. *Average Age of First Internet Use and Smartphone Ownership for Children*

The Frequency of Use of Devices for Internet Access by Children

Figure 6 shows the findings on the daily use percentages of smartphones, tablets and laptop computers for children to access the Internet.
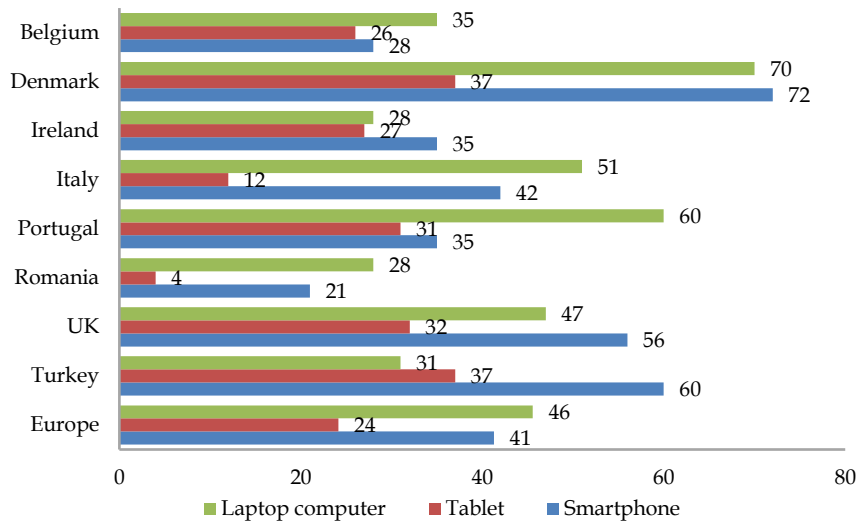
Figure 6. *Children`s Daily Use Percentages of Internet-Enabled Devices*

The percentage of daily use of smartphones and tablets for Internet access by Turkish children is above the European average. Furthermore, with 37% daily tablet use of children, Turkey has the lead along with Denmark. While the children in Turkey, the UK, Denmark and Ireland prefer smartphones to access the Internet, the children in Belgium, Italy, Portugal and Romania prefer laptop computers.

The children's use of mobile devices, such as smartphones and tablets, is an important element of the Internet's use on the move. As Figure 7 illustrates, the use of the Internet on the outside increases in conjunction with the children`s daily use of smartphones and the countries where children have the highest daily smartphone use and Internet access are Turkey, the UK, and Denmark.
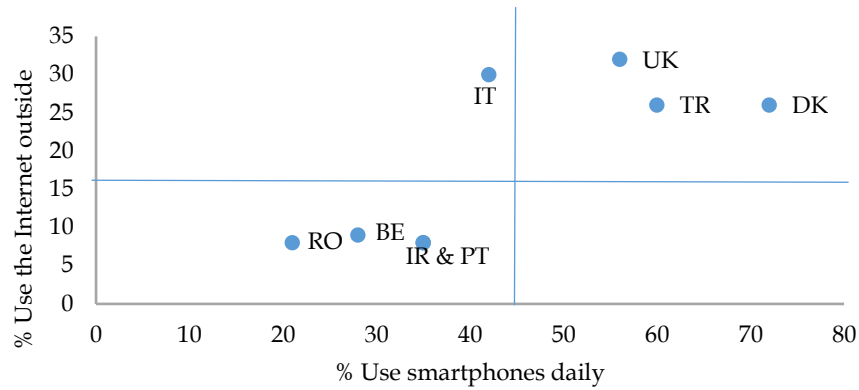
Figure 7. *Daily Smartphone Use and Outside Internet Access Percentages of Children*

Activities

In this section, findings on children's activities on the Internet are presented. Table 1 presents the analysis results of the activities that children do online with any kind of device.

Table 1

Daily Activities Children Perform on the Internet

	Turkey (%)	Europe (%)
Social networking	60	53
Watching movies and listening to music	53	53
Watching videos	44	53
Instant messaging	44	41
Use of the Internet for school works	40	29
Playing games with other people on the Internet	33	26
Downloading free applications	38	20
Uploading photos/videos to sharing sites	36	17
Visiting online chat rooms	19	16
Reading/watching online news	26	14
Commenting on a web site	31	12
Using file-sharing websites (Limewire, Kazaa)	6	9
Saving geographical location	21	9
Camera use for video calls	19	8

Table 1 Continue

	Turkey (%)	Europe (%)
Checking maps and schedules	13	6
Creating a character, pet animal or avatar	12	4
Reading e-book	16	3
Online shopping	6	2
Downloading paid applications	3	2
Scanning QR code or barcodes	5	1

As seen in Table 1, the children in Turkey and Europe mostly perform following activities on the Internet: social networking, watching movies and listening to music, watching videos, instant messaging, and other similar entertainment and communication activities. This shows that one in every two children in Turkey and Europe use the Internet for entertainment and communication purposes. Consequently, the children's use of the Internet for homework and research purposes does not take prominence.

It has also been seen that the percentage of Turkish children to perform mobile-device specific activities, such as downloading free applications and registering their geographical locations, is twice the European average. However, other activities specific to mobile devices have been observed to be the least frequently performed activities over the Internet for both Turkish and European children. In addition, the percentage of Turkish children performing activities intended for personal information sharing, such as photograph/video uploads and using the camera for video chat, found to be more than twice the percentage of European children performs such activities.

Skills

In this section, findings on the skills of children to use mobile devices and Internet technologies are presented. Children`s skills regarding mobile device use were investigated concerning downloading applications, setting geographical locations, connecting to the wireless networks and so on. The results relating to these skills are presented in Table 2.

Table 2

Children`s Skills on Mobile Device Use

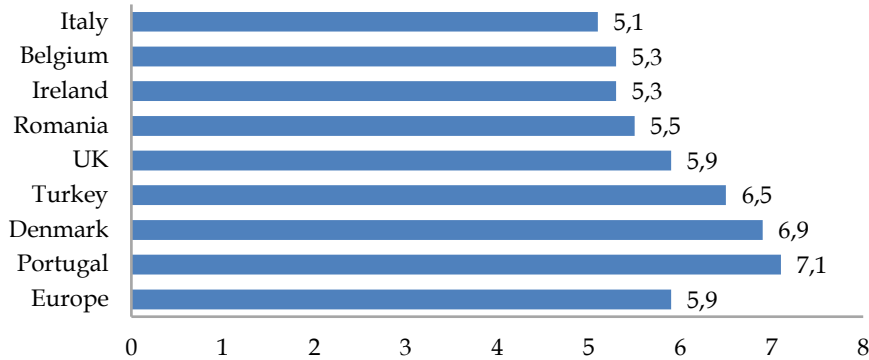|	Turkey (%)	Europe (%)
Downloading application	91	93
Connecting to a wireless network from smartphone or tablet	87	89
Protection of smartphone with PIN and screen lock	82	88
Taking photos with smartphones and uploading them on social network	77	86
Finding information on how to use a smartphone	74	68
Turning off the function of displaying the geographical location	71	63
Updating location on the most used social network	63	79
Comparing different applications with the same function to find the most reliable one	62	66
Keeping the same document, contact list and application in all of the device being used (smartphone, tablet, PC)	57	57
Blocking pop-ups that promote applications, games and services	40	48
Blocking notifications from different applications	39	61

As seen in Table 2, the majority of children in Turkey and Europe are found to have skills, such as downloading applications, connecting to wireless networks, protecting phones with PINs and screen locks and taking photos with their smartphones and uploading them on social network sites. On the other hand, the skills that children in Turkey and Europe lack the most are blocking pop-ups that promote applications, games and services. In addition, while 61% of children in Europe could able to block notifications from different applications in mobile devices, this percentage was 39% in Turkey.

In this study, Internet use skills were evaluated concerning 12 Internet skills encompassing security, communication and critical thinking. The results relating to these skills are presented in Table 3.

Table 3

Internet Use Skills of Children

	Turkey (%)	**Europe (%)**
Skills relating to Internet use and critical thinking		
Comparing different website to assess the accuracy of the information	63	49
Adding a website to favorites	56	61
Filtering search results to prevent unwanted contents	34	31
Skills relating to safe Internet use		
Finding information relating to safe Internet use	71	54
Blocking messages from unwanted people	68	60
Changing personal settings on a social network profile	66	56
Blocking unwanted adverts, spams, e-mails	61	45
Deleting the history of visited websites	60	54
Blocking pop-up pages	34	44
Skills relating to communication		
Uploading photo, video or music on social network	75	63
Commenting on a forum, website or blog	54	56
Creating a blog	22	31

Looking at Table 3, it is seen that the Internet skills of children under three categories are really close to each other in Turkey and Europe. It was determined that children in Turkey and Europe had the least knowledge on Internet use skills, such as blocking pop-up pages, using filters and creating blogs. The data indicated that one in every three children had these skills. The averages for 12 Internet usage skills of children are presented in Figure 8.

Figure 8. *Averages Internet Use Skills of Children*

It can be seen in Figure 8 that the average skill level of the Turkish children was 6.5, while the average for the European children was 5.9. Internet use skill average of children in Turkey had the third place after Portugal and Denmark.

Risks

This section focuses on the unwanted situations children encountered on the Internet, such as seeing sexually explicit photos, encountering saddening/rude people, making friends with strangers online and meeting with them offline settings, excessive use of the Internet and smartphone use, and so on. Due to ethical concerns, this part of the questionnaire was not applied to children at the age group of 9-10. Therefore, this part of the data was obtained from children in the age group of 11-16. The results relating to risks children encounter to on the Internet are presented in Table 4.

Table 4

Percentages of Children Encountering Online Risks

	Turkey (%)	Europe (%)
Seeing sexually explicit pictures	51	28
Encountering to saddening/rude people	45	23
Meeting new people over the Internet	38	26
Receiving sexually explicit messages	31	11
Meeting face-to-face with people they met on the Internet	21	12

Table 4 indicates that children in Turkey encounter more risks online compared to children in Europe. While one in every two children in Turkey comes across sexually explicit images and saddening/rude people, this ratio is one in every four children in

Europe. The percentage of children who states to have received sexually explicit messages is almost three times as high in Turkey than the European average.

Along with the increasing use of the Internet by children, analysis results relating to excessive Internet use are presented in Figure 9.
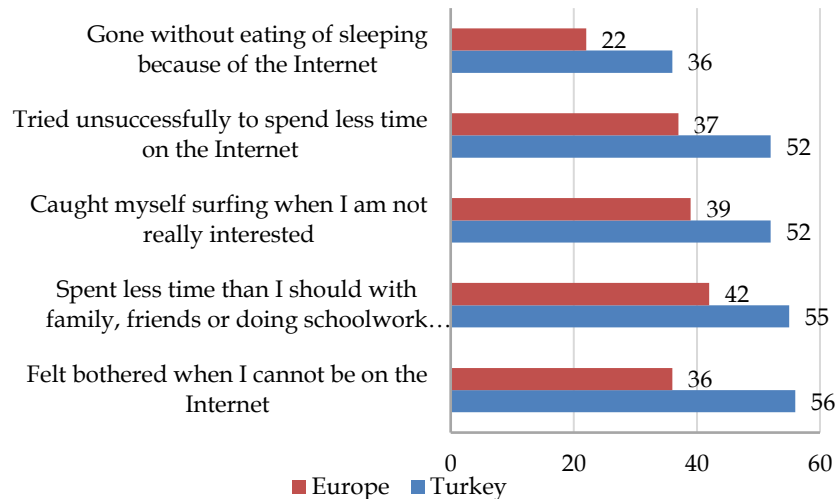
**Figure 9.** *Excessive Internet Use by Children*

It can be seen in Figure 9 that the children in Turkey tended to exhibit excessive Internet use behaviors more than the children in Europe. One in every two children in Turkey exhibited all excessive use behaviors except going without eating or sleeping because of the Internet, whereas, in Europe, one in every three children did so.

When Figure 10 is also examined, it was found that excessive phone use behaviors were more common among the European compared to the children in Turkey. In addition, both in Turkey and Europe, feeling the urge to check smartphones upon hearing something new and being sad for not being able to use smartphones due to an area without access or to battery problems were the most exhibited behaviors relating to excessive phone use. It was so much that almost three fourth of the children exhibited these behaviors.
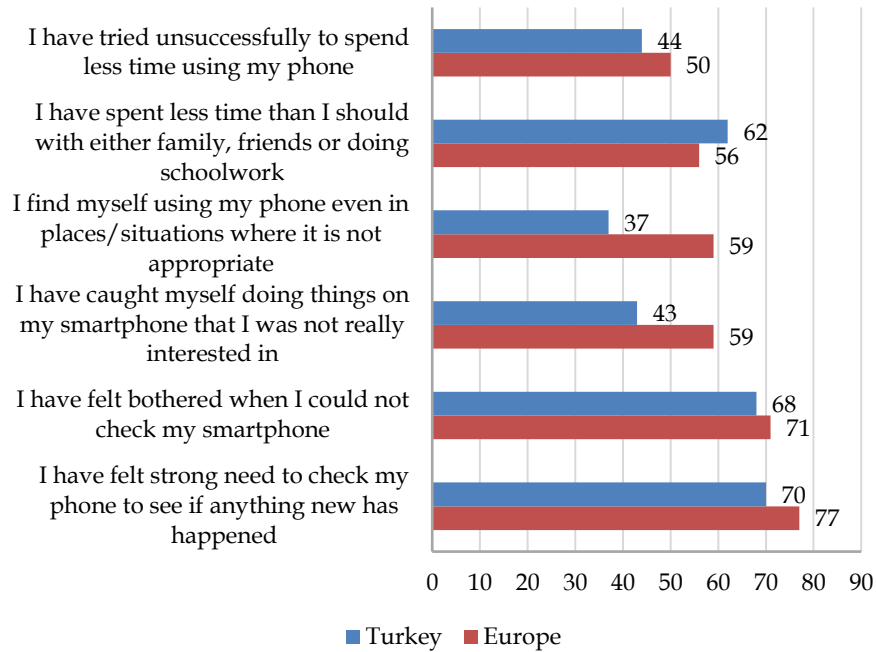
Figure 10. *Excessive Phone Use by Children*

The results relating to people with whom children share their negative experiences on the Internet are presented in Figure 11.
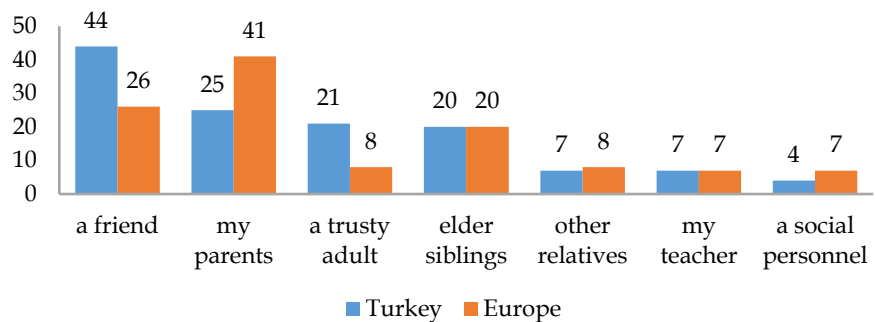
Figure 11. *People with Whom Children Share their Experiences Relating to Online Risks*

As seen in Figure 11, when the children in Turkey had a disturbing experience on the Internet, they shared it with their friends (44%), whereas the children in Europe shared it with their parents (41%). It was also confirmed that children in Turkey and Europe shared the risks on the Internet least with their teachers, social personnel and other relatives.

Discussion and Conclusion

The findings of mobile Internet experiences of children in Turkey are limited to the data obtained from schools located in the central districts of 12 provinces. Thus, comparisons relating to mobile Internet experiences of children should be evaluated considering the years when the data are collected from countries.

Internet Access and Use

Internet access of children in their own bedrooms and outside in Turkey are higher than the European average. This shows that children in Turkey have much more flexibility concerning Internet use. Lobe, Livingstone, Ólafsson and Vodeb (2011) stated that mobile devices that provide access to the Internet anywhere and anytime have an effect on the highlight that children have access to the Internet in their own bedrooms and outside. Indeed, it turns out that the proportion of children in Turkey with mobile devices, such as smartphones and tablets, is above the European average. It can be said that tablet distribution to children within the FATIH Project in Turkey (Eren, 2015; Ozkale & Koc, 2014) might have resulted in Turkish children gaining access to quite more tablets than their European peers. The FATIH Project aims to provide equal opportunities in education and improve the teaching and learning process through the use of Information and Communication Technologies (ICT) tools. The number of tablets distributed was 1.437.800 in 2015 (MoNE, 2018).

Both Turkish and European children own smartphones and start to use the Internet during their elementary school period. According to Chaudron (2015) and Croll (2016), children are becoming familiar with the Internet at very early ages and use online applications thanks to the touch screens of mobile devices, such as smartphones and tablets. In this context, the first age of having a smartphone and the average age of Internet users both in Turkey and Europe will likely to decrease even more.

Internet Activities

Children in Turkey and Europe mostly perform entertainment and communication activities. Consequently, the children's use of the Internet to do homework and conduct research remained at low levels. The extant literature also suggests that children mostly prefer activities for entertainment and communication purposes on the Internet (Akar, 2015; Ekici & Ucak, 2012; Malak, Khalifeh, & Shuhaiber, 2017). It has been seen that mobile devices, such as smartphones and tablets provide children with mobile and autonomous Internet access and allow them to perform online activities anywhere, compared to desktop and laptop computers (Chaudron, 2015; Hargittai & Hinnant, 2008; Park, 2014). In this context, mobile devices, such as smartphones and tablets can be said to have an effect on children to use the Internet for entertainment and communication. It has been observed that most common online activities carried out with mobile devices by children in Europe are watching videos and using social networks (Mascheroni & Ólafsson, 2014). Accordingly, it is believed that children develop habits of playing games and having fun with smartphones and tablets. Nonetheless, mobile devices have potential to be used beyond gaming and entertainment, such as discovering or developing oneself (Eren, 2015; Vincent, 2015).

To realize and utilize these potentials of mobile devices and the Internet, it may be beneficial to conduct in-class and extracurricular activities, seminars and educational games.

Social networking is found to be the most popular activity among children in Turkey and Europe alike. In the studies conducted with children at different age groups and in different countries, it was seen that majority of the children use social networks (Lenhart, 2015; Tomczyk & Kopecky´, 2016; Okumus, 2018). Since social networks provide a wealth of facilities, such as instant messaging, voice and video calls, sharing, and online gaming (Boyd & Ellison, 2007), they are likely to stay among the most activities children perform on the Internet.

Internet Skills

Most of the children in Turkey and Europe were found to have mobile-device-related skills, such as downloading applications, connecting to wireless networks, activating PIN/screen lock, taking photos and sharing them on social networks. Likewise, more than half of the children had basic Internet use skills, such as changing personal information on social networks, deleting web browsing history, adding web pages to favorites, and uploading pictures, music or video on social networks. These can be interpreted as a reflection of use of mobile device and the Internet by children and their interest in these technologies. Karahisar (2014) stated that the majority of the children developed their computer and Internet use skills by themselves. Additionally, it can be said that today`s children, also named as digital natives by Prensky (2001), develop these skills naturally since they were born into a technology-rich world and had a chance to meet mobile devices and the Internet at very early ages.

Although Internet use skills of children in Turkey are higher than the European average, their technical skills regarding safe Internet use, such as filtering unwanted contents, blocking pop-ups advertisements, paid applications, games and services are below the European average. As the children in Turkey are not aware of their incompetence in safe Internet use, they become more vulnerable to online risks. These children may benefit from technical-skill-development activities encouraging safe Internet use, such as editing web pages, developing mobile applications, and carrying out activities for children, to gain technical skills.

Risks of Internet

The results indicate that Turkish children encounter online risks more frequently than their European counterparts. This situation might be due to the higher Internet access and the use of percentages of children in Turkey. Moreover, the children's unmonitored and inappropriate uses of the Internet and mobile devices (Burnukara & Ucanok, 2010) and their lack of competence in Internet safety (Kasikci, Cagiltay, Karakus, Kursun, & Ogan, 2014) can render them open to online risks.

As to excessive Internet use, almost half of Turkish children and a third of Europe children exhibit excessive Internet use behaviors. In the study conducted with 2853 high school students, Yilmaz, Sahin, Haseki and Erol (2014) reported that 66.6% of the

children were addicted to the Internet on a moderate level. This suggests that Internet use among children in Turkey reached a critical level. The children' excessive use of the Internet might be due to the entertainment and communication activities they engage in online (Chang & Man Law; 2008; Eksi, 2012; Kocak & Kose, 2014) and mobile devices becoming widespread among children (Lenhart, 2015; O'Keeffe & Clarke-Pearson, 2011; Sonmez, 2013). The important communication and Internet facilities mobile devices offer may lead to excessive uses, which may easily reach to the level of addiction. In this context, it was found that children in Europe display excessive phone use behaviors more frequently than children in Turkey. Widespread smartphone use among children and parents' hardship in monitoring children's mobile device use might have a role in children's excessive use. In this sense, parents can convince their children of the necessity of limiting their screen time and Internet use, or they can also monitor how much time their children spend on the Internet by installing parenting applications, such as KidTime and Screen Time on their children's mobile devices.

When faced with disturbing content over the Internet, Turkish children share this experience mostly with their friends, while European children share such an experience primarily with their parents. In the literature, the studies report that online risks are mostly shared with parents and friends (Ayas & Horzum, 2013; Slonje & Smith, 2008). This can be explained by that children feel closer to their parents and friends and that they trust them. Aslan and Karakus Yilmaz (2017) stated that in addition to increasing children's awareness of online risks, we should make other parties in their social environments aware of safe Internet use because coping with disturbing content on the Internet is a process that involves every actor present in the social environment.

Future studies can investigate the activities children do online and the risk they encounter, focusing specifically on Internet access through mobile devices. Future studies can design applications and activities that aim to redirect the children's attention from using the Internet for entertainment and communication purposes to using it for research and study, and then evaluate the effectiveness of the designs. Qualitative studies can be conducted to create in-depth accounts of the online risks that children encounter, their coping strategies, and the support they receive from the social environment.

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Türkiye ve Avrupa'daki Çocukların Mobil İnternet Deneyimleri: İnternet Erişim, Kullanım, Etkinlikler, Beceriler ve Risklerin Karşılaştırmalı Analizi

Atıf:

Özet

Problem Durumu: Çocuklar arasında internet erişimi noktasında mobil cihazların yaygınlaşması her ne kadar zaman ve mekân esnekliği, yeni iletişim ortamları vb. gibi imkânlar sunsa da yeni riskleri de beraberinde getirmektedir. Mobil internet kullanan çocukların internette daha fazla risklerle karşılaştıkları ve güvenli internet kullanımına yönelik yeni becerilere ihtiyaç duydukları görülmektedir. Mobil internet kullanımının giderek yaygınlaşmasına rağmen henüz tepe noktasına ulaşmadığı düşünüldüğünde yakın gelecekte çocukların mobil internet kullanımıyla birlikte yaşayabilecekleri olumsuz durumların daha da artarak karmaşık bir hale gelmesi muhtemeldir. Bu nedenle, yapılacak çalışmalar yeni risklerin tanımlanması, farklı boyutlarıyla değerlendirilmesi ve bu risklere yönelik sahip olunması gereken yeni becerilerin neler olacağı hususunda yol gösterici olması gereklidir. Bu bağlamda Amerika'da PEW Araştırma Merkezi Avrupa'da ise Net Children Go Mobile (NCGM) proje grubu çocukların mobil internet deneyimlerine yönelik çalışmalar gerçekleştirirken Türkiye'de 9-16 yaş grubu çocuklara yönelik makro ve mikro ölçekte herhangi bir çalışma yapılmadığı görülmektedir.

Araştırmanın Amacı: Bu çalışmada, Türkiye'deki çocukların mobil internet deneyimlerine yönelik mevcut durumu ortaya koymak ve Türkiye ile NCGM projesinde yer alan 7 Avrupa ülkesindeki çocukların internet deneyimlerini karşılaştırmak amaçlanmıştır.

Araştırmanın Yöntemi: Çalışmada nicel araştırma yöntemlerinden tarama araştırma modeli tercih edilmiştir. Türkiye'deki çocukların evrenini temsil edebilecek bir örneklem oluşturmak için tabakalı örnekleme yöntemi kullanılmıştır. Bu bağlamda, Türkiye İstatistiki Bölge Birimleri Sınıflandırmasına göre 12 bölgeden 9-16 yaş aralığındaki 784 çocuk, yaş gruplarına ve cinsiyetlerine göre eşit sayıda dağılacak şekilde çalışmaya dahil edilmiştir. Çalışmada NCGM projesi kapsamında EU Kids Online (EUKO) çalışma grubu tarafından geliştirilen anket kullanılmıştır. Elde edilen veriler SPSS programına aktırılmış olup verilerin çözümlenmesinde yüzde, frekans, aritmetik ortalama gibi betimsel istatistik teknikleri kullanılmıştır.

Araştırmanın Bulguları: Türkiye'deki çocukların kendi odaları (%60) ve dışarıdaki (%26) internet erişimlerinin Avrupa ortalamasının üstünde olduğu ortaya çıkmıştır. Çocukların akıllı telefonlara sahip olma oranları Türkiye'de %64 iken Avrupa'da %46'dır. Türkiye'deki çocukların tabletlere sahip olma oranı ise (%57) Avrupa'nın yaklaşık 3 katı (%20) olması dikkat çekicidir. Türkiye, İngiltere, Danimarka ve İrlanda'daki çocuklar günlük internet kullanımları için en fazla akıllı telefonları tercih

ederken Belçika, İtalya, Portekiz ve Romanya'daki çocukların ise dizüstü bilgisayarları tercih ettiği ortaya çıkmıştır. Bununla birlikte, Türkiye ve Avrupa'daki çocukların interneti ilk kez yaklaşık 8,5 yaşında kullandıkları, ilk akıllı telefonlarına da 12 yaşındayken sahip oldukları görülmüştür.

Türkiye ve Avrupa'daki çocukların internette günlük bazda en fazla sosyal ağları kullanma, çevrimiçi film izleme veya müzik dinleme, internette video klip izleme ve anlık mesajlaşma gibi eğlence ve iletişim amaçlı etkinlikleri gerçekleştirdikleri görülmüştür. Bu durum Türkiye ve Avrupa'daki yaklaşık her iki çocuktan birinin interneti eğlence ve iletişim amaçlı kullandığını göstermektedir. Bunun bir yansıması olarak çocukların interneti ödev ve araştırma yapmak için kullanımlarının ikinci planda kaldığı ortaya çıkmıştır. Türkiye'de çocukların ücretsiz uygulama indirme (%38) ve coğrafi konum kaydetme (%21) gibi mobil cihazlara özgü etkinlikleri gerçekleştirme oranları Avrupa ortalamasının iki katı olduğu ortaya çıkmıştır. Mobil cihazlara özgü diğer etkinlikler hem Türkiye'de hem de Avrupa'da çocukların internette en az gerçekleştirdikleri etkinlikler arasında yer aldığı görülmüştür.

Türkiye ve Avrupa'daki çocukların büyük bir kısmının uygulama indirme, kablosuz ağlara bağlanma, PIN/ekran kilidi koyma, fotoğraf çekip sosyal ağlarda paylaşma gibi mobil cihazlara özgü becerilere sahip olduğu ortaya çıkmıştır. Benzer şekilde çocukların yarısından fazlasının sosyal ağlarda kişisel ayarlarını değişme, ziyaret ettikleri web sitelerinin kaydını silme, web sitelerini sık kullanılanlara ekleme, sosyal medyaya resim, müzik veya video yükleme gibi temel internet kullanma becerilerine sahip oldukları görülmüştür. İnternet kullanımına yönelik 12 beceriye ilişkin ortalamalara bakıldığında, Türkiye'nin 6,5 ortalaması ile Avrupa ortalamasının (5,9) üstünde, ülkeler arasında Portekiz ve Danimarka'dan sonra üçüncü sırada yer aldığı görülmüştür. Buna rağmen Türkiye'deki çocukların arama yaparken istenmeyen içerikleri filtreleyebilme, reklam içeren açılır pencereleri, uygulamalardaki uyarıları ve pop-up sayfaları bloke edebilme gibi güvenli internet kullanımına yönelik becerilerinin Avrupa'daki çocukların gerisinde kaldığı ortaya çıkmıştır.

Türkiye'deki çocukların Avrupa'daki çocuklara kıyasla internet riskleriyle daha fazla karşılaştıkları ortaya çıkmıştır. Türkiye'de yaklaşık her iki çocuktan birisi ahlaka aykırı resimlerle ve üzücü/kırıcı kişilerle karşılaşırken, Avrupa'da bu oran her dört çocuktan biridir. Türkiye'de ahlaka aykırı mesajlar aldığını belirten çocukların oranı Avrupa ortalamasının neredeyse üç katıdır. Ayrıca aşırı internet kullanmaya yönelik davranışları Türkiye'deki çocukların, aşırı telefon kullanmaya yönelik davranışları ise Avrupa'daki çocukların daha fazla sergiledikleri ortaya çıkmıştır. Türkiye'deki çocuklar internette rahatsız edici bir durumla karşılaştıklarında bunu en fazla arkadaşlarıyla (%44), Avrupa'daki çocuklar ise ebeveynleriyle (%41) paylaştıkları tespit edilmiştir. Ayrıca Türkiye ve Avrupa'daki çocukların internette karşılaştıkları riskleri en az öğretmenleri, sosyal görevliler ve başka birileriyle paylaştıkları görülmüştür.

Araştırmanın Sonuçları ve Önerileri: Bu çalışmada, Türkiye'deki çocukların mobil internet deneyimlerine yönelik mevcut durumu anketler aracılığıyla toplanan verilerle

ortaya koyulurken NCGM projesinde yer alan aynı veri toplama aracıyla çalışmalar yürüten 7 Avrupa ülkesindeki çocukların deneyimleriyle karşılaştırılmıştır.

Türkiye'deki çocukların kendi odalarında ve dışarıdaki internet erişimleri, akıllı telefon ve tablet gibi mobil cihazlara sahip olma ve bu cihazları günlük kullanım oranları Avrupa ortalamasının üstünde olmasının bir yansıması olarak Danimarka ve İngiltere ile birlikte Türkiye'deki çocukların internet erişim ve kullanım esnekliğinin daha fazla olduğu sonucuna varılmıştır. Bu kullanım esnekliğiyle birlikte, hem Türkiye hem de Avrupa'daki çocukların internette daha çok eğlence ve iletişim amaçlı etkinlikler gerçekleştirmesi mobil cihazların oyun ve eğlencenin ötesinde öğrenme, kendini keşfetme veya geliştirme vb. noktalarda sunduğu fırsatların kaçırılmasına sebep olmaktadır. Çocukların internet ve mobil cihazlara olan ilgisi ve kullanımlarının bir yansıması olarak bu teknolojileri kullanmaya yönelik temel becerilerinin geliştiği ancak güvenli internet kullanımına yönelik becerilerin yeterince gelişmediği sonucuna varılmıştır. Özellikle Türkiye'deki çocukların internet kullanım esnekliğinin Avrupa ortalamasının üstünde olması ve güvenli internet kullanım becerilerinin de Avrupa ortalamasının altında olması göz önünde bulundurulduğunda Türkiye'deki çocukların Avrupa'daki çocuklara kıyasla internette risklerle daha fazla karşılaşmaları olması beklenen muhtemel bir sonuçtur. Çalışmanın sonuçları doğrultusunda uygulamaya yönelik şu önerilerde bulunulabilir:

- Çocuklara internet ve mobil cihazların bireylere öğrenme, kendini keşfetme veya geliştirme noktasındaki potansiyelini anlamaya ve kullanmaya yönelik seminerler, ders içi ve ders dışı etkinlikler, eğitsel oyunlar düzenlenmesi faydalı olabilir.
- Çocukların güvenli internet kullanımı becerilerini kazanmasına yönelik web sayfaları düzenlenmesi, mobil uygulamalar geliştirilmesi ve okullarda etkinlikler yapılması faydalı olabilir.
- Ebeveynler mobil cihaz ve internet kullanımında zaman sınırının gerekliliğini çocuklarına açıklayarak ikna edebilir ya da çocuklarının mobil cihazlarına KidTime, Screen Time gibi zaman sınırlama uygulamaları yükleyerek mobil internette geçirdikleri süreleri kontrol altına alabilirler.

Çalışmanın sonuçları doğrultusunda araştırmaya yönelik şu önerilerde bulunulabilir:

- Çocukların sadece mobil cihazlar ile internete erişimleri temel alınarak internette gerçekleştirdikleri etkinlikler ve karşılaştıkları riskler incelenebilir.
- Çocukların eğlence ve iletişim amaçlı internet kullanım algılarının araştırma ve ödev yapmaya yönlendirecek uygulamalar ve etkinlikler tasarlanıp bunların etkililiklerini ortaya koyan çalışmalar gerçekleştirilebilir.
- Çocukların internette karşılaştıkları riskleri, risklerle başa çıkmak için yaptıklarını ve sosyal çevrelerindeki bireylerden aldıkları desteği derinlemesine ele alan nitel çalışmalar gerçekleştirilebilir.

Anahtar Sözcükler: Çocuklar, mobil internet, internet erişimi ve kullanımı, internet becerileri, internet etkinlikleri, internet riskleri