PATTERNS IN INTERNET USE AMONG CHILDREN AND ADOLESCENTS IN ROMANIA

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ABSTRACT

Drawing on the work of Hasebrink *et al.* (2011) the purpose of this paper is to identify patterns in children's online use by classifying them based on the types of opportunities taken up online. This classification will allow us to examine if children in Romania report differences in Internet usage. The following variables were used to form clusters: duration of use, range of activities, number of risky online activities, and type of activities. Additionally, age and gender were considered in order to distinguish between younger and older users. As previous studies argued (Fizesan 2012), some activities may enhance the benefits of going online thus they are labelled opportunities (e.g. the provision of own-language creative or playful content, or a lively community of people who share one's hobby). On the other hand, some activities may enhance the likelihood of harm from going online and for that reason they may be labelled risks (e.g. the ready availability of explicit pornography or the activities of people who are aggressive, racist or manipulative). For comparison purposes, based on the previous cluster analysis conducted by Hasebrink *et al.* (2011) across EU we decided on the six clusters solution. The description of the cluster follows the work of Haserbrink *et al.* (2011) and highlights the specificities for Romanian children.

***Keywords*:** children's Internet use; digital inequalities; digital access; patterns of Internet use.

INTRODUCTION

The potential impact of the new forms of information and communication technologies on almost every aspect of society has received a lot of attention in the past two decades. However, few studies addressed how are children and young people using these new technologies, what impact have on their development and

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social relations or if some children are excluded from these opportunities while others will grow in a media-rich environment (Livingstone & Haddon 2009). An increasing body of literature highlights that children and adults should not be studied together, arguing that the differences between their online experiences are significant and present, both in empirical and theoretical terms. This shift relies on the fact that most of the studies concerned with the effects of the Internet on different aspects of society have focused on the adult's online behaviour, presuming that children's online experiences are similar (Lobe *et al.* 2011). However, since 2000, the number of studies regarding children and the Internet access and use has been growing gradually. Most of them focus on the effects of the new media diffusion on children's lives, and, at the same time, on understanding the necessity of developing a critical analysis on children's experiences, needs, and concerns in terms of media usage (Livingstone & Haddon 2009). The majority of these studies include teenagers aged 14 to 15 year-old, whereas only a few of them consider children aged five or under because of the complications involved in the data collection for this age group. Internet access and use represent one of the most popular topics in new media and children studies across all countries. However, a growing body of studies turn their attention on other aspects such as children's online interests and activities, online skills, gender differences in terms of children's online experience of the Internet, and children's social networking.

LITERATURE REVIEW

There are two mainstream trends that shape the body of literature regarding the connections between children and new media (Lobe *et al.* 2009), namely the optimistic and the pessimistic. Both of them are simplified perspectives that most often than not ignore that the relation between young adults and media are complex and interactive (Lobe *et al.* 2009). The first relies on the possible opportunities for self-expression, sociability, community engagement, creativity, and new literacies (Livingstone & Haddon 2009, 28) that the Internet has to offer in general, with specific opportunities (e.g. new forms of learning and thinking) for children. Accordingly, optimists expect that the Internet will cultivate new opportunities for democratic and community participation, for creativity, self-expression and play, for the expansion of available knowledge, thereby also supporting diversity, difference and debate (Norris, 2001). Pessimists, on the other hand, predict that children are exposed to several new risks and harm (e.g. Commercial, sexual, ideological, and abusive) when using the Internet. Accordingly, more often than not children are unaware of their presence and, therefore, are not skilled enough to cope with them (Livingstone & Haddon 2009). Irrespective of the approach, the current generation of children are seen as one that has to deal with new situations

consequent upon technological change. Learning no longer requires a trip to the library but rather requires skills of searching, navigation, and evaluating that are unfamiliar to many adults, whether it is about parents or teachers. Photo albums are online as are birthday wishes, diaries, records of past conversations, and more, and nothing is ever lost, though it may be regretted (Livingstone *et al.* 2012). Moreover, according to Boyd (2010) social networking sites promote new social norms in relation to friends, best friends or even deleting friends as children learn to manage the amplified social dramas that may occur online.

Understanding what children do online and what techniques they use in order to embed the Internet in their everyday lives could offer valuable insights regarding the benefits/gratifications gained from the use of the Internet or other technologies. Unfortunately, there is scarcity in the theoretical and empirical development regarding the nature of digital engagement among individuals. Some of the studies interested in how individuals embrace the Internet in their everyday life suggest several possibilities through which people can engage with technology. However, the academic research regarding the factors that make digital engagement successful in improving people's everyday life is scarce. Helsper (2008) recalls four digital mediators that can affect the way individuals engage with new technologies, namely: relevance (i.e. Usefulness), quality of experience (i.e. Ease of use), ownership, and sustainability (i.e. Social and financial). Bradbrook and Fisher (2004 as cited by Helsper & Galacz 2009) recommend a composed of five factors in order to measure the digital engagement, which they named as "the 5 C" of digital inclusion: Connectivity (access), Capability (skills), Content, Confidence (self-efficacy) and Continuity. Helsper and Galacz (2009) argue that digital inclusion often fails to incorporate the idea of continuity, especially in groups that are vulnerable to social exclusion. Summarising these theoretical approaches, Helsper (2008) suggests that three categories are vital in order to understand the relation between social inclusion and digital engagement, specifically: access, use and skills.

Following the work of Helsper (2008) and van Dijk (2005), the further section discusses how Romanian children make use of the Internet based on these three core categories: access, use and skills.

SAMPLE AND METHOD

The present findings rely on the EU Kids Online II database. Adopting a child-centered, comparative, critical and contextual approach, EU Kids Online II project aimed to design, conduct and analyse a macro level quantitative survey of children's experiences of online opportunities and risk. The survey encompassed questions about children's Internet use, digital literacy, coping responses, perceptions and safety practices. The findings related to children's experiences

were systematically compared to the perceptions and practices of their parents. For the purposes of this dissertation, further sections will cover only the questions regarding children's Internet use, parents' Internet use, and digital literacy. The questions related to children's Internet use rely on the hypothesis that the range of ways children use the Internet, the amount of use and the digital skills a child has at his or her disposal depend on the socioeconomic status (SES) of their households as well as on their age, gender, and country (Hasebrink *et al.* 2011). Moreover, a hypothesis regarding the benefits or the harm encountered online was admitted. Accordingly, some activities are likely to prove beneficial (e.g. School work) and others seem less gainful (e.g. Bullying others) and many seem to be indeterminate (e.g. Downloading music, making friends online). Furthermore, children were also asked about their online activities, in order to understand how do young people act online and how embed the Internet in their daily lives. These activities were also assumed to be determined by demographic variables and country variables. Some of them may enhance the benefits of going online, some other may enhance the likelihood of harm from going online.

The sample on Romania consists of 1041 children with ages between 9 and 16 years whereas 51 per cent are boys. 70 per cent of them use the Internet every day or almost every day while only one per cent of them admit that it is using less than once a month. The most common device used by Romanian children in order to get Internet access is a shared PC (58%), closely followed by their own PC (48%) or mobile phone (19%). In average, a child from Romania uses 1.6 devices in order to get online, far behind European average 2.44. When it comes to locations from where they get Internet access, Romanian children use the Internet at school and home, both from their own bedroom (48%) or the living room (45%). Unfortunately, there are no studies to measure how many children miss the opportunities that the Internet has to offer due to lack of access.

In order to describe how children make use of the Internet in Romania, several descriptive statistics were implied. Further, for a deeper understanding of the patterns in Internet use among Romanian children, a cluster analysis was conducted based on the work of Haserbrink *et al.* (2011).

INTERNET ACCESS AND USE AMONG CHILDREN IN ROMANIA MATERIAL ACCESS

As in the case of children across EU countries (Livingstone *et al.*, 2011), Romanian children differ in the ways they incorporate the Internet in their everyday life when it comes to the frequency of use or the amount of private Internet use by their age, gender, and SES. If in frequency of using the Internet Romanian children report higher levels of everyday use than EU average, when it comes to accessing the Internet from a wider range of locations Romanian children rank far behind EU average. According to EU Kids online dataset, in Romania,

young people access the Internet, in average, from 1.6 locations while EU children access the Internet, in average, from 2.4 locations. Livingstone and Helsper (2007) suggest that a broader range of access locations relates to more unsupervised access and thus more independent use of the Internet. Accordingly, each location of use implies particular social conventions of freedom, the use from the own bedroom being most private and autonomous use. In this respect, as in the case of children across EU, one in two Romanian children enjoy the privacy of their own bedroom when access the Internet. However, as seen in Figures 2 and 3, some of them are enjoying more than others. Consequently, older children, boys, from high SES households are more likely to use the Internet more frequently and in a private manner than are younger children, girls, from medium or low SES households. The same pattern can be observed when considering private use from mobile phone or handled device. Firstly, regardless of age, gender or SES, Romanian children report lower levels of mobile or handled device use than their European counterparts. Only 2 in 10 children in Romania get Internet access through these devices compared with almost 4 in 10 children across EU. Additionally, vast generational gaps concerning mobile use for Internet access can be observed among children in Romania. While only 5 per cent of 9–10 year-olds uses the mobile phone, 32 per cent of 15–16 year-olds make use of the Internet via their mobile phone. The same differences can be observed between children that come from high SES households and those who are living in low SES households. According to Livingstone and Helsper (2007; 2009) these inequalities can translate in differences in the levels of Internet skills that children possess, which in turn can cause widening digital gaps among children. As argued before, online experience is one of the key factors that shape the way children make use of the Internet, which in turn cause differences in online opportunities taken up online. Therefore, it is essential to observe if there are differences among children in Romania when it comes to the amount of time they spend online on an average day. As the Figures show (see Apendix), Romanian children differ in respect to their online experience along the lines of age, gender, and SES. Firstly, boys spend on average more time online than girls and are using the Internet at younger ages. Secondly, older children are using the Internet on an average day with almost one hour more than younger children. The graphic showed in Figure 6 offers support for the findings according to which children begin using the Internet, nowadays, at younger ages (Livingstone *et al.* 2011). According to Figure 6, if children that in 2010 were 16 year-old started to access the Internet at age 12, those who were 9 year-old in 2010 started to make use of the Internet at age 7. Finally, the socioeconomic status of the household is also a key factor both for the amount of time spent online on an average day, as well as for the average age when a child first uses the Internet. Regardless of age or gender, children that live in high socioeconomic status households make use of the online world every day, on average, for a longer time than those coming from low SES households. Additionally, privileged children are online at younger ages than

those unprivileged. The differences in the quality of access among children and teenagers in lines of demographic factors, i.e. Age, gender, and SES reproduce and reinforce inequalities in terms of benefits taken up from using the Internet. Hasebrink *et al.* (2011) highlight a strong statistical relation between quality of access and the variety of activities that a child performs online. Accordingly, the more children enjoy unrestricted domestic access, either via various platforms or from their own bedroom, and the longer they have incorporated the Internet in their everyday lives, the more activities they perform online. As a consequence, the quality of access and age of first use work as determinants for the opportunities children experience online (Hasebrink *et al.* 2011, 25). In sum, these results show that older children, boys, from high socioeconomic households are more likely to enjoy greater online experiences than younger children, girls, coming from low socioeconomic households. This may indicate that Romanian children also differ in respect to the levels of opportunities they take up online. This subject will be further developed.

SKILL ACCESS

As shown in the previous section, there are several ways in which the level of skills that a child posseses can affect the quality of its Internet use, which in turn can affect how the user benefits of the Internet. EU Kids Online asked children (11-16 year-old) about eight specific skills, with a focus on digital safety and information skills. On average, Romanian children say they can do 3.4 of the eight things asked about, which ranks Romanian children much below the European average of 4.2.

Most of 9-16 year-olds can bookmark a website (46%), block messages from someone they do not wish to be in contact with (53%) or find safety information online (61%). About one in three Romanian children can change privacy settings on a social networking profile (38%), block junk mail and spam (36%). Less than half (45%) can delete their history on an Internet browser. One in four children can change filter preferences (28%). With regard to information skills, less than a half (48%) say they compare websites to judge the quality of information. This is considerably below the European average, i.e. 61%. Across all ages, children in Romania are below their European equivalents in this basic area of media literacy. Looking at differences by age and gender, girls claim fewer skills than boys. Moreover, boys are more competent in managing to block unwanted content or their privacy settings on a social networking profile than girls.

Table 1

Children's skills by Age and Gender

% admit that are able to...	9–12 year old		13–16 year old		
	Boys	Girls	Boys	Girls	Total
Compare different websites to decide if information is true	29	27	60	57	48
Change filter preferences	12	19	37	31	28
Bookmark a website	29	25	64	46	46
Block unwanted adverts or junk mail/spam	18	19	46	35	36
Delete the record of which sites you have visited	19	29	59	52	45
Change privacy settings on a social networking profile	16	19	51	43	38
Block messages from someone you don't want to hear from	37	31	67	56	53
Find information on how to use the **Internet** safely	49	35	73	66	61
Average number of skills	2,0	2,0	4,4	3,7	3,4

Source: EU Kids Online II dataset, own computations. Base: All children, 9–16.

Furthermore, the EU Kids Online survey asked children about their levels of digital skill, including their own confidence in using the Internet (a measure of self-efficacy "I know lots of things about the Internet") as well as their level of knowledge compared to parents ("I know more about the Internet than my parents"). One third of all children admit it is very true for them that they know lots of things about the Internet. Just over half says it is a bit true and less than a fifth (18%) says it is not true. More than a half of 9–16 year olds (57%) knows more about the Internet than their parents: for less than one third (25%) it is a bit true and for less than a fifth (18%) it is not true (Göryig, 2012).

Here, the effect of age is clearly emphasized with a pronounced increase in relative digital confidence from just 20% of nine to ten year-olds to 47% of fifteen to sixteen year-olds saying that they know more about the Internet than their parents even if teenagers are significant more confident in their own Internet use than younger children are it is pertinent to stress that less than half say they know lots of things about the Internet. Contrasting, more than 80 per cent of teenagers claim to know more about the Internet than their parents. Younger children (9–12 year-old) are far more likely to say they do not know as much as their parents. Gender plays less of a role, though slightly differences can be observed. Surprisingly, girls report both more confidence in their own use and claim to know more about the Internet than their parents comparing to boys.

However, the role of SES is intriguing. When it comes to their confidence in Internet use, children from high SES backgrounds report higher levels than those

from low or medium SES background. On the opposite, when it comes of their Internet knowledge in relation to their parents' knowledge, children that live in privileged households are more likely to admit that they know less about the Internet than their parents, comparing to children from low and medium SES households.

This evidence can be explained at a first glance if we recall that adults report lower levels of digital skills in Romania than the EU average and that these levels differ by their education Therefore, it is highly possible that parents, who live in high SES households, are more experienced when it comes to Internet use than parents who live in low and medium SES households. In sum, these results underline that digital natives are those children who say they know more about using the Internet than their parents, being at the same time confident in their own use.

USAGE ACCESS

What do Romanian 9–16 year-olds do when they go online and how this differs along the lines of age, gender, and SES? To understand the online opportunities children enjoy and to provide a context for the investigation of the differences between them, EU Kids Online II Survey asked 9–16 year-olds about which activities they take up when accessing the Internet. In what follows, the responses of Romanian young people regarding their Internet usage will be investigated.

The most popular activity (88%) is using the Internet for schoolwork, closely followed by playing Internet games on their own or against the computer (83%) and using instant messaging (82%). Entertainment/ information and communication uses would appear to dominate. The more creative and production-oriented activities are the more sophisticated use of the Internet is required, becoming less popular among children and adolescents. Only one in ten children spend time in a virtual world or write a blog or online diary (9%) while less use file sharing (6%). The average number of activities per child is 7.3, which ranks Romania above the average reported by children across Europe. The same hierarchy can be observed even in the case of the teenagers, who use the Internet more. They are slightly above their European counterparts: teenage boys across Europe reported on average 9 activities and girls cited 10 while, in the case of Romania boys report 9.3 activities and girls 8.2. As Table 13 shows, age is a significant factor in the kinds of activities taken up: watching video clips and playing computer games are popular with all ages; communication use (SNS, email, IM) is more for teenagers. Gender differences are small except in relation to gaming (more for boys) and online social networking (more popular with girls).

PATTERNS IN INTERNET USE

Drawing on the work of Hasebrink *et al.* (2011) the purpose of this section is to identify patterns in children' online use by classifying children based on the types of opportunities taken up online. This classification will allow us to examine if children, in Romania, report differences in Internet usage. The following variables were used to form clusters: duration of use, range of activities, number of risky online activities, and type of activities. Additionally, age and gender were considered in order to distinguish between younger and older users. As argued before, some activities may enhance the benefits of going online thus they are labelled opportunities (e.g. the provision of own-language creative or playful content, or a lively community of people who share one's hobby) while some activities may enhance the likelihood of harm from going online and for that reason they may be labelled risks (e.g.the ready availability of explicit pornography or the activities of people who are aggressive, racist or manipulative). For comparison purposes, based on the previous cluster analysis conducted by Hasebrink *et al.* (2011) across EU, we decided on the six clusters solution. The description of the clusters follows the work of Hasebrink *et al.* (2011) highlighting the specificities for Romanian children.

"Low use, low opportunities/or risk" (Cluster 1) users are characterized, as the name suggests, both by a small amount of online use and a small range of activities. Moreover, children belonging to this group are the youngest within all six groups and are using the Internet mostly for playing and school work. It is, also, the largest group among all six.

"Low-use, gaming/or entertainment oriented" (Cluster 2). This is quite similar to cluster 1, with low levels of opportunities taken up or risks encountered. The relevant difference is given by higher values for the duration of use. These users are also very young and, apparently, their use is not gainful. 7 per cent of the total sample is part of this group.

"Learning–oriented" (Cluster 3) children, compared to those from the first two clusters, have a bigger range of activities, exploring all types of activities with a focus on school work and entertainment (e.g. watching video clips and playing online). These children also report a moderate use, spending in average 106 minutes online on a typical day, boys being more likely to belong to this group. A quarter of Romanian children are characterized by this cluster.

"Moderate-use, entertainment, and communication-oriented" (Cluster 4). Compared to Clusters 1–3, users in this group have shifted their focus to content and communication based activities. These children are older and spend more time online, undertaking almost nine activities. This cluster accounts for 15% of children, placing it as the third largest user group among Romanian children.

"High-use, social networking oriented" (Cluster 5) users are about 13 year old and are higher risk-encounters, spend longer time online, report high levels of social networking and other participatory activities. One in ten children belongs to this group in Romania.

Average values	CL1	CL2	CL3	CL4	CL5	CL6
% of cases	34	7	25	15	10	9
Girls	49	49	46	42	47	35
Boys	51	51	54	58	53	65
9–10 year-olds	37	34	25	21	13	5
11–12 year-olds	30	27	24	24	20	14
13–14 year-olds	20	24	26	33	34	30
15–16 year-olds	14	16	25	22	32	51
Average age	11.7	11.9	12.5	12.7	13.2	14.1
Estimated minutes online each day	54	106	106	148	194	255
Risky online activities	1,0	1,4	1,6	1,6	2,1	2,4
Online activities	5,5	6,6	7,8	8,5	9,2	10,1
Content-based activities						
Watched video clips (e.g. On YouTube)	61	82	84	89	90	94
Played games on your own or against the computer	84	78	81	91	88	87
Used the Internet for school work	86	85	89	90	89	89
Downloaded music or films	36	52	64	71	78	90
Read/watched the news on the Internet	21	24	38	41	45	47
Contact/communication-based activities						
Visited a social networking profile	28	51	60	63	69	82
Sent/received email	45	69	68	67	71	77
Used instant messaging	73	79	86	90	93	96
Played games with other people on the Internet	47	59	61	63	78	73
Used a webcam	36	53	49	46	62	65
Visited a chat room	8	22	16	22	19	29
Conduct/peer participation activities						
Put (or posted) photos, videos or music to share	9	24	22	28	33	48
Put (or posted) a message on a website	10	31	29	40	39	54
Created a character, pet or avatar	9	18	20	19	31	35
Spent time in a virtual world	3	9	11	11	17	22
Used file sharing sites	2	5	5	6	10	20
Wrote a blog or online diary	3	9	9	14	13	15

Note: The clusters were obtained through Hierarchical Cluster Analysis, using Ward's method, the distance between the clusters being measured with Squared Euclidian Distance; single solution: six clusters; Base: All children, 9–16 year-olds; N=1040.

Source: EU Kids Online II dataset, own computations. Base: All children, 9+.

Figure 1. Patterns in Internet usage among children, in Romania.

"Focused social web use" (Cluster 6) consists of most experienced and older users. One in two 15–16 year-olds belongs to this group. They are characterised by the longest during of daily online use, highest risky online activities, and account for one of the smallest number of users and are most likely to be boys. Moreover, these users are expected to benefit most from using the Internet since they engage in most creative and advanced activities.

These results reconfirm, on the one hand, the previous findings on gender differences in Internet use among young people. As the cluster descriptions show, there is a general tendency of "the more and the more": time spent online, the wider range of activities and risky online activities are all positively correlated. This is also in line with the "ladder of opportunities" hypothesis and highlights substantial differences in the patterns of young people's Internet use and online experience (Balea 2016). Accordingly, older children are more experienced, engage in a broader range of opportunities and risks, and use the Internet in a creative and advanced way. In sum, the cluster analysis emphasizes the variety of Internet usage among children and adolescents and thus, rejects the digital native narratives, findings that emphasiye previous studies results (Balea 2016; Livingstone *et al.* 2011) Only children that belong to the last two clusters, especially those from the focused social web use cluster, are digital natives since they are most digitally engaged by using the Internet for the largest amount of time, undertaking a wider range of online activities, which in turn help them to achieve the last and most advanced step in the ladder of opportunities.

CONCLUSION

It is clear that the variations in the ways in which young people make use of the new technology in Romania is significant. As analysis showed, children and young people are divided in regard to their Internet use based on their range of online opportunities taken up. For some the Internet is a "rich, diverse, engaging and stimulating" resource (Hargittai 2008), which becomes more and more influential in their everyday lives, while, for others it remains an unexplored resource, or in the best case an occasionally useful resource. Those who know how to use the digital media to address their need can reap significant benefits from it. In contrast, those who lack abilities in these domains may have a harder time dealing with certain logistics of everyday life, may miss out opportunities, and may also obtain incorrect information from unreliable sources.

These findings are more important since several studies showed that the particular societal positions that children and young people inhabit are reflected in their Internet use. Accordingly, the differences in Internet use and gain from it are not randomly distributed since those who are already more privileged, in terms of gender (male), ethnicity, and SES, tend to have more Internet use autonomy and resources, more online experiences, higher levels of digital skills, and report engaging in diverse online activities than the less privileged (Hargittai 2010; van

Dijk 2005; Helsper & Eynon 2009). These results, argues Hargittai (2010), raise concern about possibly increased rather than decreased inequality resulting from the spread of Internet use across the population.

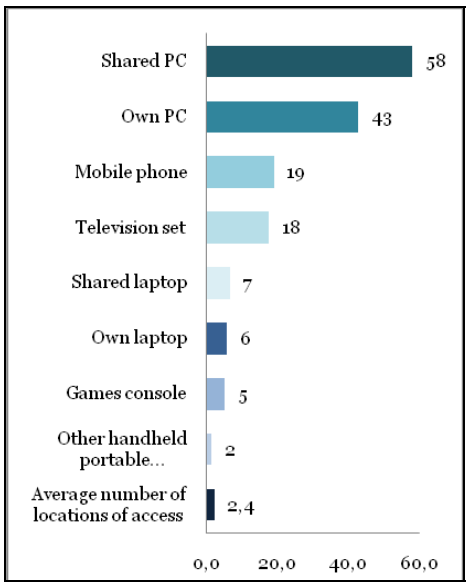

Figure 2. Most common devices for Internet use.

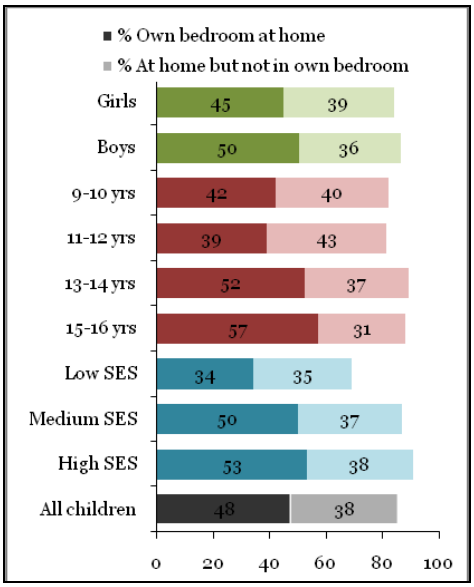

Figure 3. Private Internet use by Age, Gender and SES.

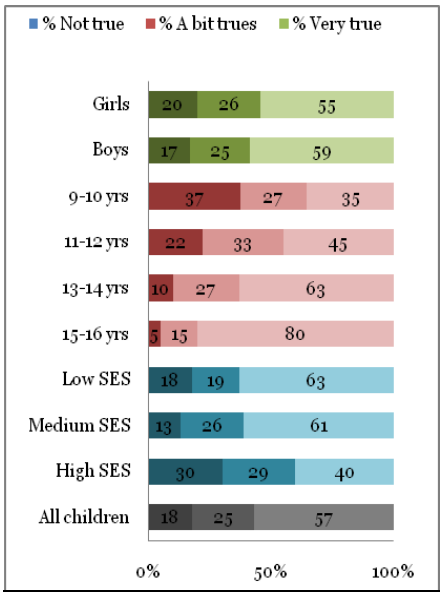

Figure 4. How long children use the Internet on an average day (in minutes).

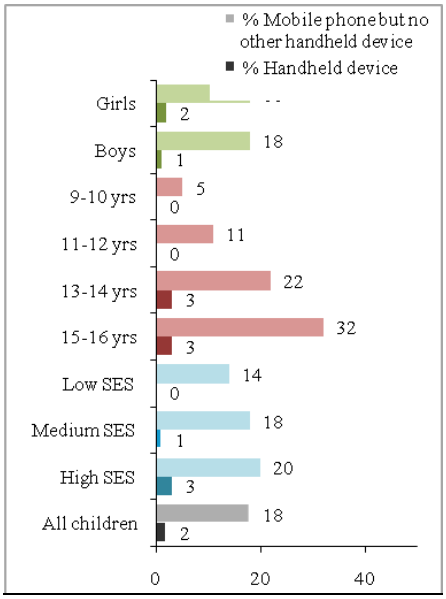

Figure 5. Child accesses the Internet using a mobile phone or handheld device.

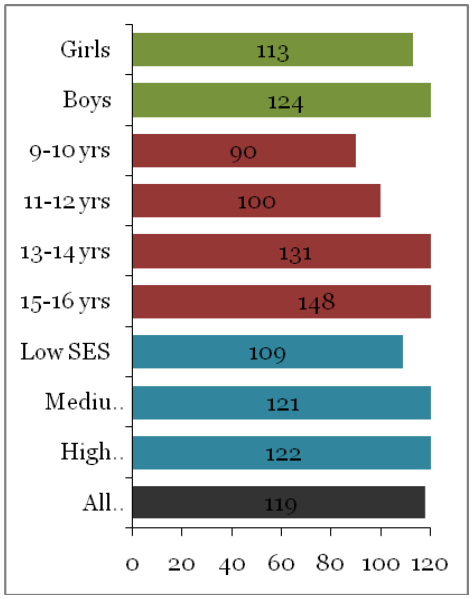

Figure 6. Time spent online in a typical day by Age, Gender, and SES.

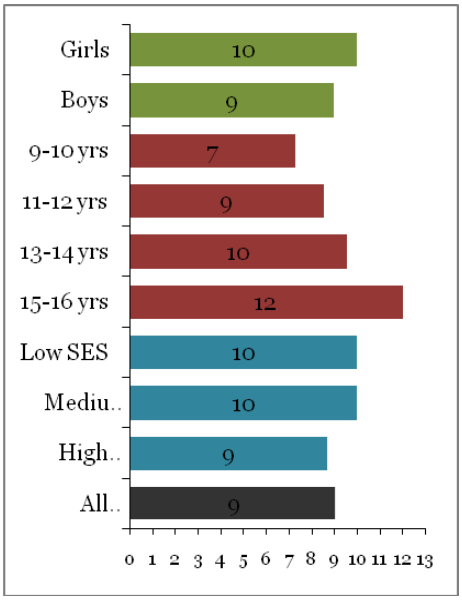

Figure 7. Age at first use by Age, Gender, and SES.

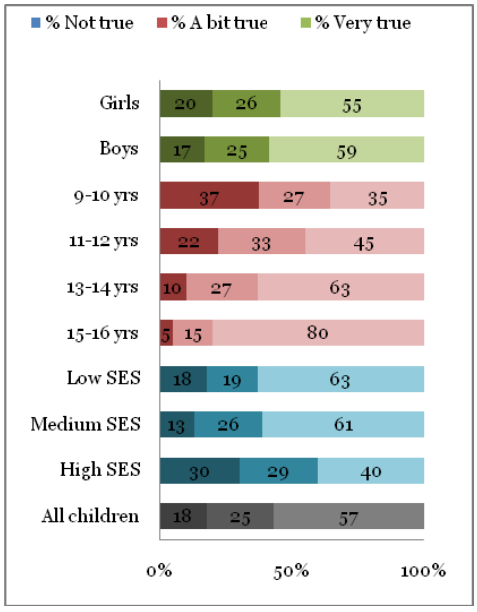

Figure 8. "I know more about the Internet than my parents".

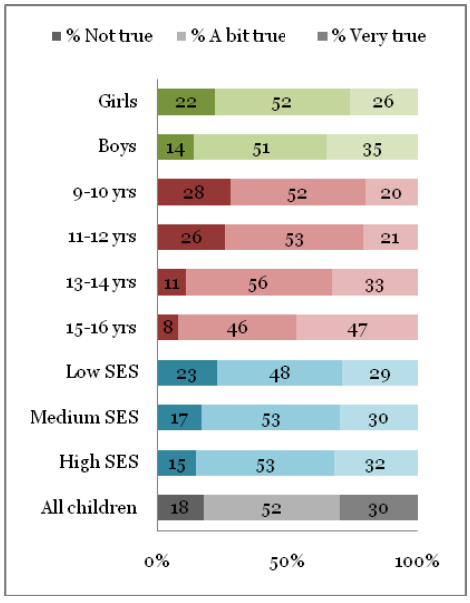

Figure 9. "I know lots of things about the Internet".

Source: EU Kids Online II dataset, own computations. Base: Romania, All children, 9+

REFERENCES

BALEA, B. (2016). Digital Natives Or Not? How do Romanian adolescents cross the boundaries of Internet common use. *Studia UBB Sociologia*, 61(1), 59–77.

BRADBROOK, G. & FISHER, J. (2004). *Digital Equality: Reviewing Digital Inclusion Activity and Mapping the Way Forwards*. London: CitizensOnline.

BOYD, D. (2010). Social Network Sites as Networked Publics: Affordances, Dynamics, and Implications. In Papacharissi, Z. (Ed.), *Networked Self: Identity, Community, and Culture on Social Network Sites*, New York: Routledge, pp. 39–58.

FIZESAN, B. (2012). Digital engagement among children in Eastern Europe. *Studia Universitatis Babes-Bolyai Sociologia*, 57(1), 83–101.

GÖRZIG, A. (2012). Methodological framework: the EU Kids Online project. In S. Livingstone, L. Haddon & A. Goerzig (Eds). *Children, risk and safety online: Research and policy challenges in comparative perspective*. Oxford: Policy Press (UK).

HARGITTAI, E. (2008). The Digital Reproduction of Inequality. In Grusky, D., Manwai, C. and Szelényi, S (Eds.), *Social Stratification: Class, Race, and Gender in Sociological Perspective*, 3rd edition, Boulder: Westview Press, pp. 936–944.

HARGITTAI, E. (2010). Digital Na(t)ives? Variation in Internet Skills and Uses among Members of the Net generation. *Sociological Inquiry*, 80 (1), 92–113.

HASEBRINK, U. GÖRZIG, A., HADDON, L., KALMUS, V. and LIVINGSTONE, S. (2011). *Patterns of risk and safety online: in-depth analyses from the EU Kids Online survey of 9- to 16-year-olds and their parents in 25 European countries*. London: EU Kids Online Network.

HELSPER, E. (2008). *Digital Inclusion: An analysis of Social Disadvantage and The Information Society*. London: Communities and Local Government Publications.

HELSPER, E. J., & EYNON, R. (2010). Digital natives: where is the evidence?.*British educational research journal*, *36*(3), 503–520.

HELSPER,E.J., & GALACZ, A. (2009). Understanding the links between digital engagement and social inclusion in Europe. In A.Cheong and G. Cardoso (Eds), *World Wide Internet: Changing Societies, Economies and Cultures*, Taipa (Macau): Macao University Printing House.

LIVINGSTONE, S., HADDON, L., GÖRZIG, A., and ÓLAFSSON, K. (2011). *Risks and safety on the Internet: The perspective of European Children*. Full findings. LSE, London: EU Kids Online.

LIVINGSTONE, S., & HADDON, L. (2009). *Kids Online: Opportunities and risks for children*. Bristol: The Policy Press.

LIVINGSTONE, S., HADDON, L., & GORZIG, A. (2011). *Children, Risk and Safety Online: Research and policy challenges in comparative perspective.* Bristol: The Policy Press.

LIVINGSTONE, S. & HELSPER, E. (2007). Gradations in digital inclusion: Children, young people and the digital divide. *New Media &Society*, 9, 671–696.

LIVINGSTONE, S. & HELSPER, E. (2009). Balancing opportunities and risks in teenagers' use of the Internet: The role of online skills and family context. *New Media & Society*, 12(2), 309–329.

LOBE, B., SIMÕES, A., & ZAMAN, B. (2009). Research with children. In Livingstone, S. and Haddon, L., (eds.). *Kids online: opportunities and risks for children*. Bristol: The Policy Press.

NORRIS, P. (2001). *Digital Divide: Civic engagement, information poverty, and the Internet worldwide*. Cambridge: Cambridge University Press.

VAN DIJK, J. (2005). *The deepening divide*. London: Sage.