

Uses of the Internet by children and youth

Results of the EU Kids Online II

Valentina Marinescu

Faculty of Sociology and Social Work, University of Bucharest, Bucharest, Romania

valentina.marinescu@yahoo.com

Anca Velicu

Institute of Sociology, Romanian Academy, Bucharest, Romania

anca.velicu@gmail.com

Abstract:

Children relationship with the media and especially with new media made the object of ongoing arguments at every level. From the man in the street to researchers, from educators to politicians, from the industry to parents, all feel entitled to take a stand towards this issue which is usually thought from two antagonistic perspectives: that of risks and, on the other hand, that of the opportunities (new) media presents to young users. And although, from time to time, this debate gets ideological, there still is a ground for empirical research where the two perspective should meet: namely, the studies which, starting from the actual uses of the Internet, try to determine afterwards which are the risk behaviors and which, the opportunities brought along by the online.

This is our approach for this article: trying to identify/sketch a picture of the Internet use by European youth and teenagers (9-16 years old) – as it came out from one of the more extensive pan-European researches on the subject, EU Kids Online II.

The specific aspects we would focus on will be:

- 1. When, where and since when do kids use the Internet?*
- 2. What are the activities they take upon online?*
- 3. Regarding these activities, what's the ratio between information/education and socializing/entertainment?*

Key-words: *Children, Youth, Internet, Social Network Sites*

Expressing the issue and its importance

Our purpose in writing this article is to do an X-Ray of the situation regarding the use of the Internet by the children in Romania and those in Bulgaria by comparison to the media in the European Union.

First let us motivate our choices: why is such a monographic research important (one that would describe the real status of the consumption at the level of a well determined population) and why did we choose the comparative analysis of the youth in Romania and those in Bulgaria? We will begin with the latter question, then following with the answer to the former question which will also give the theoretical background and the current status of the research.

Why Romania and Bulgaria?

Beside the geographical vicinity and the macro-region both of these countries pertain to (Eastern Europe) as well as the recent history that has tied them under the term of “countries of the former communist block”, the introduction of the new communication technologies (NTIC) in these spaces has taken place somewhat at the same time and, under many aspects, sharing in a common pattern. Thus, according to the final report of the EU Kids Online II project (Livingstone et al., 2011), both of these states have a low GDP per capita per year, with a recent history of the generalization of the use of the Internet at population level (0-2 years since 50% internet use) and with a relatively similar percentage of the households who use wideband Internet (24 % for Romania and 26% for Bulgaria). Moreover, at the general objective of the research, which is getting a “risk map” of the Internet use for the European children, the two states we are interested

in are, again, in the same group, that of the “higher use, higher risk countries” (Livingstone et al., 2011), together with the Czech Republic and the Western Europe countries (Norway, Sweden, Denmark, Estonia, Lithuania)¹. Beside these general aspects that make them extremely similar, as we will see next, a detailed analysis will nonetheless show that there are also some differences, notable ones too sometimes, in regard to the patterns of using the new ICT in the two states.

Why a monographic perspective?

The studies regarding the use of the Internet have increased in variety, in a relatively short period of time since the Internet has become the mass media. The variety was given by the problems or the hopes at the level of the society which appeared together with the apparition and generalization of this environment. Therefore, first starting with a positive perspective on the Internet (it offers access to knowledge) the research focused mainly on the issue regarding the access to this new environment. In this context the majority of the studies talked about the “digital divide”, either placing it under the question mark, at least in the strict meaning of the term access (Steyaert, 2002), or freely affirming its existence, many times these discussions being political in essence (Van Dijk, Hacker, 2000). At this level the policy paper type and the descriptive approaches were predominant, numerous researchers showing that, actually, the issue was rather an ethical one (Gunkel, 2003, Hacker, Mason, 2003) or an ideological one (van Dijk, Hacker 2000). This digital divide could be at state level – North versus South, West versus East (Hüsing, 2004, Pfell, 2008, Van Dijk, 2008) – according to the gender of the users (boys – high users, girls low-users)² (Wartella et al., 2000, Brandtzæg et al., 2004), between the socio-economical status (Wilson et al, 2003), or even between the residence environments, urban versus rural (Hindman, 2000). Moreover, considering “digital divide” as simply opposing and deriving from the access to the respective technology is still not very clear, as long as access in itself can be conceptualized in different ways (Selwyn, 2004, Van Dijk, 2000, Steyaert, 2002). In general four dimensions are mentioned, but in different studies these are different. Van Dijk proposes: psychological access, material access, skills access, usage access while Steyaert starts with the physical access in order to get to the informational one. The majority of the studies suggested though that, even though the spread of technology may have seemed at some point as being the main issue, in the long run the real issues that should be taken into consideration at the level of public policies are the ones regarding the “technology-illiteracy” and “information-illiteracy”³, the discussion about the digital divide actually going back to the older discussion elaborated in the “knowledge gap theory” (Steyaert, 2002; van Dijk, Hacker, 2000; DiMaggio, Hargitte, 2001). Once technology was generalized, this theoretical context became irrelevant, however a reminiscent of actuality of the issue regarding the differences in the use of the internet still remaining⁴. Thus we move from the concept of “digital divide” to that of “digital inequality” (DiMaggio, Hargitte, 2001; Stiakakis et al., 2009) defined as “inequality among persons with formal access to the Internet” (DiMaggio, Hargitte, 2001). The two authors elaborated this

¹ Four groups were formed in which risk is evaluated depending on the use. Thus we have “lower use, lower risk”, “lower use, some risk”, “higher use, some risk” and “higher use, higher risk” (Livingstone et al, 2011).

² The gender differences hypothesis in using media proved to be true especially regarding the interactive media, unlike the use of television (Heim et al., 2007).

³ “Information-literacy: the ability and attitude to search for relevant information translate that to one's own situation and implement the necessary actions.” (Steyaert, 2002).

⁴ Hacker and Mason (2003) use a famous quote from *Animal Farm* in order to describe this situation: “All animals are created equal, but some are more equal than others.” (George Orwell, apud Hacker, Mason, 2003).

concept in five dimensions: “in equipment, autonomy of use, skill, social support, and the purposes for which the technology is employed” (DiMaggio, Hargitte, 2001).

The growing access of children to the new media (Livingstone, Bovill, 2001; Brandtzæg et al., 2004) bring to attention the research on risks (meeting strangers, sexting, cyber-bullying being mentioned the most) and, more recent, those on the ratio between opportunities and risks (Livingstone, Haddon, 2009). Thus, the public agenda radically changed the issue of the access and that of the competences of using the media being quasi-forgotten in favor of the issue regarding safety from the danger the Internet seems to represent for children. The EU Kids Online project, the results of which are presented in this article, wanted to avoid this side tracking precisely, thus starting with the descriptive study of what is actually happening (how many children use the Internet, what sites they navigate on and how much time they spend on the Internet, how many times etc.) and only after that moving on to talk about the risks and opportunities regarding the use of the Internet by children.

The methodology and the set of data

The “EU Kids Online II” survey (done in the spring – summer of 2010) 25.142 Internet users were questioned, ages 9 - 16 as well as adults, the children’s parents or legal guardians (approximately 1000 internet-users for each country). The interviews took place in the homes of the children and involved a face to face questionnaire for the child, a questionnaire that was filled in by the children themselves (for the delicate questions) and a face to face questionnaire for the child’s legal guardian.

The sample for Romania included 1041 children, teenagers and parents (or legal guardians), being representative for the population of the country aged 9-16, with an error margin of +/- 2 %. Similarly, the sample for Bulgaria included 1088 children, teenagers and parents (or legal guardians), being representative for the population of the country ages 9-16, with an error margin of +/- 2 %.

Analysis of the results

Frequency of Internet use

Like we have already said, both countries are in the class of higher users. Thus, both in Romania and Bulgaria the frequency of daily Internet use by children and adolescents is higher than that at the European level: 80.1% (Bulgaria) and 70.8% (Romania) as compared with 65.1% (EU). The remaining users, except those using the Internet on a daily basis, rather fit into the moderate users category as well (once or twice a week) – the European Union: 28.8%, Romania: 25.2% and Bulgaria: 17.7% (and not so much in the occasional users category – “once or twice a month or less”).

Age when the Internet use started

An important indicator of the Internet use is that of the “history” of the relationship between the users and the respective media, in this case a central dimension being the age they first used the Internet, the theories of communication agreeing on the fact that the young person or child is a introductory factor of a new media inside the household (Brown, Venkatesh, 2005.). Moreover, when we talk about the “digital divide” showing between different states, among others, two dimensions are taken into consideration: the spread of the Internet within the respective countries and the age they first accessed the Internet (Livingstone, Haddon, 2009). The former, in the virtue of the spread and generalization of technology, has an ascending trend whereas the latter dimension seems to be in inverse ratio to the former: the higher the Internet spread rate, the smaller the age children access the Internet. Still, if the former dimension can, at limit, tend to

100% (and in some states more than 90% of the households have Internet access), the latter is limited by the nature of things. Thus, the Euro-barometer from 2008 showed that (Hasebrink et al., 2009) a climax phase had been reached, the respective age for Europe being somewhere between 10-11 years old. Meanwhile things have evolved at the level of the first dimension, at least in the case of the two states we are interested in for this article. In Romania the evolution was from 42% of the children using the Internet in 2005 to 70% in 2008, in Bulgaria the growth being even greater, from 41% in 2005 to 81% in 2008 (Livingstone, Haddon, 2009: 111). At the level of all the states in the EU the growth in the three years wasn't this spectacular, many of the technologically advanced states being at that time in a climax phase (the mean at the level of the 27 European states in 2005 was 70% and in 2008 75%). What about the second dimension? The EU Kids Online II (2010) research shows that, in both countries children access the Internet later than the European mean: the European Union: 8.75 years old; Bulgaria: 8.96 years old; Romania: 9.27 years old. Still we need to see that in the two years between the studies (2008 Eurobarometer; EU Kids Online, 2010) the average age of the first access dropped by two years at the level of Europe, which means a lot at the level of childhood age. This age of the first Internet use is more homogenous at the children in Bulgaria (std. dev.=0.2.079) than those in Romania where the values of the age of the first Internet use are more varied (std. dev.= 2.524).

Length of the Internet use on a school day

Beside the frequency of Internet use, an important indicator that gives us an image of the NTIC consumption among children and teenagers in the two countries is the length of the Internet use. In general this length is differentiated in two situations: school day (for children during a "school day") and week-end or holiday (generically called a "non-school day").

As far as the Internet use on a school day is concerned the data indicate the fact that, just like the situation at the European level, the children and teenagers in Romania and Bulgaria use it more than two hours during school days.

There is, however, a series of variations between the Romanian and Bulgarian children and teenagers.

A higher percentage of the Bulgarian children and teenagers tend to use the Internet up to two hours every school day (33.9% compared to 29.8% in the case of the Romanian children and teenagers).

At the same time, a higher percentage of the children and teenagers in Romania use the Internet more than three hours a day on a school day (10.5% compared to 8.2% in the case of the children and teenagers in Bulgaria).

Table 1. Length of the Internet use on a day (the European Union, Bulgaria and Romania)

	European Union		Romania		Bulgaria	
	school day	non-school day	school day	non-school day	school day	non-school day
Don't know	1.5	1.9	1.7	2.3	0.7	2.1
About half an hour or less	26.8	13.7	14.2	4.3	14.6	3.3
More than half an hour to an hour	28.7	19.7	27.3	11.3	29.1	9.3
More than an hour to 2 hours	25.0	26.7	29.8	24.0	33.9	25.7
More than 2 hours to 3 hours	8.7	15.8	13.7	23.2	12.3	26.9
More than 3 hours	6.4	19.0	10.5	30.0	8.2	29.8

	European Union		Romania		Bulgaria	
Not at all	3.0	3.2	2.8	4.8	1.1	2.8

On a non-school day, the children and teenagers in Bulgaria and Romania tend to use the Internet more, compared to the European average length. The Internet is used “more than three hours on a non-school day” by 30% of the children and teenagers in Romania and by 29.8% of the children and teenagers in Bulgaria compared to an average of 19% in the European Union. Likewise, the children and teenagers in the two countries use the Internet more frequently “between two and three hours” compared to average percentage at the European level: 26.9% - for Bulgaria - and 23.2% - for Romania – compared to 15.8% at the level of the European Union.

If we consider a “low consumption” – less than half an hour a day, “average consumption” – between half an hour up to 2 hours - and “hard/heavy consumption” – more than 2 hours, we notice that on a normal school day, the majority of the children in the two countries are, in trend with the average values of the European Union, in the category of the average users. But if at the level of the mean of the European Union the next category is that of the low users (with 26.8%), at the level of Romania and Bulgaria the next numerous category is that of the hardly users, with 24.2% in Romania and 20.5% in Bulgaria (the European average for this category being 15.1%). During a non-school day the situation becomes even more radical in the two states, the first place being occupied by the category of the heavy users (56.7% for Bulgaria and 53.2% for Romania), while at the level of the European Union the category of the moderate users (46.4%) is still on the first place. Both the level of Romania as well as that of Bulgaria, the percentage of those with low consumption or non-consumption on a non-school day is under the average percentage of the European Union.

Devices used for the internet in the last period of time

The third important indicator regarding the NTIC consumption is that of the number of devices used by children and teenagers to access the Internet. According to the data of the EU Kids Online II survey, the average number of devices used by the children and teenagers from Romania is inferior to both the average quantity of devices used by the Bulgarian children and teenagers as well as the mean at the European level: 1.59 devices are used by the children and teenagers in Romania compared to 2.26 devices (Bulgaria) and 2.54 (EU).

What are the devices and means favored by the children and teenagers in the two countries in order to access the Internet? At the level of the entire European Union and the two countries studied, the most used device for accessing the Internet is a “shared PC” – 24.8% (at the level of the European Union), 36.8% (Bulgaria) and 25.2% (Romania). Second in this “hierarchy” is the personal computer - 15.1% of the European children and teenagers declaring they use it in order to access the Internet, the percentages in the case of the two analyzed countries being 29.1% (Bulgaria) and 23.1% (Romania) as far as the use of this device is concerned.

Besides fitting into the general European tendency there are some variations that differentiate the children and teenagers in Bulgaria and Romania in relation to the European average situation. Thus, if a larger number of Romanian children and teenagers declare they use computers and laptops (personal ones or shared) in order to access the Internet (69.8% in the case of Romania compared to 52.2% for Bulgaria), in the case of Bulgaria the highest percentages are in the case of the children and teenagers who declare that in order to access the Internet they use mostly their TVs (20% compared to 11% for Romania) and mobile phones (19.3% compared to 11.9% in the case of Romania).

The places from where the Internet is accessed

The place the Internet is accessed and used from is an important indicator not only for the NTIC consumption but (especially) for the “sociability” degree in report to the Internet use. In other words, assigning a certain physical space in this case offers important indications regarding the way children and teenagers understand the concept of “assuming” the NTIC and how they adjust their behavior as a consequence. Thus, the data from the EU Kids Online II survey indicate the fact that, at the level of the European Union children and teenagers favor the public locations in order to access the Internet: a common room in their household – 20.7% - and a classroom - 20.1%. For the two countries analyzed (Bulgaria and Romania) the shared/common locations have their importance in accessing and using the Internet as well: 23% of the Bulgarian children and teenagers and 21.5% of the Romanian ones use the Internet from school or college while 18.3% of the Bulgarian children and teenagers and 17.2% of the Romanian ones use it from a common room in the household they live in.

Still, the analysis of the existing set of data indicate the fact that on the second place in this case, after using the Internet from school or college, the place favored by the children and teenagers from Bulgaria and Romania to access the Internet is a “private”, individualized one, that is their own room in the house of their family: 22.7% of the children and teenagers from Bulgaria and 20.7% of this from Romania declare that they use the Internet from their own bedroom or some other separate room in the house compared to only 16.6% of the European children and teenagers who declare the same thing.

Digital competences

The series of the indicators categorized as “digital competences” classes includes the mean of the on-line activities the children and teenagers are involved in and the types of specific activities realized on the Internet.

As far as the number of online actions realized by the children and teenagers is concerned, the results of the EU Kids Online II survey indicate the fact that, on an average, these participated in 3.6 activities on the Internet in the last year. However, when we compare the European Union, Bulgaria and Romania we can notice that in the case of the children and teenagers from Romania the value of this index (3.3) is inferior to that registered in the case of Bulgaria (3.5) and the European Union (3.6).

The activities of the children and teenagers involving the Internet were measured by means of three distinct questions included in the questionnaire applied at the level of the entire sample. Thus, the children and teenagers were asked if in the last month they did sixteen types of specific activities involving the Internet.

Table 2. The specific activities involving the Internet (European Union, Bulgaria and Romania)

Please tell me if you have done this in the PAST MONTH on the internet:	European Union	Romania	Bulgaria
Used the internet for school work	32.0%	34.1%	30.5%
Watched video clips (e.g. on YouTube)	32.7%	30.3%	30.3%
Downloaded music or films	18.5%	22.7%	26.7%
Read/watched the news on the internet	16.9%	12.8%	12.5%
Sent/received email	21.9%	21.9%	15.9%
Visited a social networking profile	23.1%	18.5%	18.7%
Visited a chatroom	8.3%	5.7%	9.8%
Used instant messaging	23.0%	29.6%	31.8%

Please tell me if you have done this in the PAST MONTH on the internet:	European Union	Romania	Bulgaria
Played games with other people on the internet	17.4%	21.0%	20.5%
Spent time in a virtual world	6.4%	3.4%	3.3%
Used a webcam	19.6%	36.5%	22.0%
Put (or posted) a message on a website	20.1%	21.2%	16.4%
Written a blog or online diary	7.2%	6.5%	5.2%

According to the results of the EU Kids Online II survey one of the differences between the Romanian and Bulgarian children in relation to the average registered at the level of the European Union is a higher lack of interest on their part regarding the existing socio-political situation at a certain time: only 12.5 of the Bulgarian children and teenagers and 12.8% of the Romanian ones watch the news on the Internet compared to 16.9% at the level of the European Union.

At the same time, the children and teenagers in the two countries tend to use more the instant messaging, to download more documents and use webcams more compared to the level these activities are realized at by the children and teenagers at the level of the entire European Union. Thus, 36.5% of the Romanian children and teenagers and 22% of the Bulgarian ones use webcams (compared to 19.6% at the level of the European Union) while 31.8 of the Bulgarian children and teenagers and 29.6% of the Romanian ones say they use instant messaging (compared to 17.4% of those at the level of the European Union). As far as the activity of “downloading” internet documents is concerned, 26.7% of the Bulgarian children and teenagers and 22.7% of the Romanian ones declare they did this in the last month compared to 18.5% of those in the European Union.

Internet network gaming is more frequently practiced by the children and teenagers in the two countries in report to the average of the European Union, 20.5 of the Bulgarian children and teenagers and 21% of the Romanian ones declaring that in the last month they played games on the Internet with other people compared to 17.4% who declared this at the level of the entire European Union.

There is a series of variations in the “palette” of the activities involving the Internet that are specific to each country. Thus, if 32% of the children and teenagers in the European Union and 34.1% of those in Romania declare that, in the last month, they used the Internet in order to do their homework, only 30.5% of the Bulgarian children and teenagers did this activity involving the Internet in the last month.

At the level of the comparison between the two countries we can also notice the fact that, unlike the children and teenagers from Romania, the ones from Bulgaria use the Internet in order to visit a chat-room more (9.8% - Bulgaria – compared to, respectively, 5.7% - Romania) and for sharing music and videos in the Internet (18.5% - Bulgaria - and 4.6% - Romania). Also, the children and teenagers from Romania use the e-mail more (21.9%) compared to those from Bulgaria (15.9%) and post more messages on websites (21.2% - Romania – compared to 16.4% - Bulgaria).

Participation in social networks on the Internet

The current NTIC consumption involves as well a specific form of Internet use, the activities regarding the creation and maintaining of a profile on a on-line social network (social networking sites).

In both countries the percentage of children and teenagers who declare they have an active profile on an on-line social network is smaller than that registered at the level of the European Union: 50.6% (Bulgaria) and 46.3% (Romania) compared to 61.3% (the European Union).

The number of these profiles on the social networking sites is another indicator of the use of NTIC. The data from the EU Kids Online II research show that there are differences both in relation to the media registered at the level of the European Union for the two countries as well as variations regarding the ratio between Romania and Bulgaria taken into consideration individually. Thus, on one hand, compared to the number of children and teenagers from the European Union who declared they had a unique profile on a social networking site (71.8%), the percentage of the children and teenagers in Romania who declare this is superior to the average (75.2%), while in Bulgaria the percentage is inferior (70.4%). On the other hand, the number of Bulgarian children and teenagers who have a profile on more social networking sites is superior to both the one registered at the level of the European Union (28.2%) as well as that registered in Romania (24.8%).

Placed in the category of the “risks” associated to the Internet use, setting the one’s profile on social networking sites as “public, so that anyone can see it” is considered an indicator for both the use of NTIC as well as for the level of “self-revealing” for the owner of the respective profile. The analysis of the set of data thus indicates that, in the case of the Bulgarian children and teenagers the highest percentage is of those having a profile (profiles) on social networking sites set to “private, for friends only” (45.4%), a superior percentage to both the one registered at the level of the European Union (40.9%) as well as in the case of Romania (34.9%). At the opposite pole, 42.9% of the Romanian children and teenagers declare that their profile (profiles) on social networking sites is (are) set to “public, so that anyone can see” (only 27.3% of the children and teenagers in the European Union and only 28.7% of the Bulgarian ones declared to have this option set for their profile(s) on social networking sites).

Conclusions

As we were saying in the introduction, we wanted to offer a big picture regarding the use of the Internet by the children (9-16 years old) in Romania and Bulgaria as showed by the latest and most extensive study that allows for comparisons at the level of the different states, that is the EU Kids Online II study. Thus, both Romania as well as Bulgaria, states that entered the “technological race” relatively late, made huge progress regarding the spread of the Internet (of technology) on their territory. In general we learned that the young people in both states have a relatively similar pattern for using the Internet which justifies placing them in the same group of “higher usage, higher risk”. What still discriminates Romania from the European media is the “privatization of the consumption”, under both aspects that were studied: the use of the personal bedroom and the use of the mobile devices (and in general the personal ones). At both dimensions Bulgaria is superior to the European average, while Romania is under the average. The interpreting of this data is dual though: Bulgaria has a technological advance whereas Romania has an advance regarding usage safety (in common rooms, can involve the parents’ supervision). Also, in both countries, the socio-economic status no longer represents a variable in “digital divide”.

Another aspect that makes the two states radically different is that of children’s trust in the Internet. Thus, the Bulgarian young people are among those who trust the benefits of the Internet

the most at the level of the EU⁵ (having one of the highest scores in perceiving the positive aspects and one of the lowest scores in perceiving the negative ones, approx. 40%) while the Romanian young people are more reserved in their appreciations, believing that besides the “good things the Internet can bring the children their age” (ones they admit a little over the European average), “there are also things regarding the Internet that can bother children their age” (the percentage of the children in Romanian believing this being approx. 70%, 15 higher than the Europe average).

Going back to the move we were talking about in the beginning, from digital divide to digital inequality, we must notice that the two states are still advanced compared to the European average under this aspect. Therefore, when we talk about the activities done on the Internet, we notice that the young people from both Romania and Bulgaria use the Internet less for information and more for entertainment. While the preoccupations related to a higher Internet access were mainly determinates by the interest in the growth of the civic behavior (van Deursen, van Dijk, 2009). Moreover, as far as the civic issues are concerned, we notice more at the Bulgarian young people but at the Romanian ones as well, a disapproving behavior at the level of some European states (France for example) regarding the activity of downloading (music, films, soft-ware).

As far as the general competences in Internet use are concerned, the young people from Bulgaria are superior to those in Romania, being more often involved web 2.0 type use (that is creating and posting contents on the Internet), better mastering the issues regarding the safety of the Internet use (see the case of setting one’s profile on online social networks). As a general conclusion we would say that, even though the two states have all the conditions necessary in order to be similar under the aspect of the Internet use by children, there are still certain differences (not significant ones though) regarding the use competences, a dimension of the digital inequality.

Bibliography

- Brandtzæg, P.B., Endestad, T., Heim, J., Kaare, B.H. and Torgersen, L. (2004). ‘Media Technology and Different Patterns of Use among Children in Norway’, paper presented at the Digital Generation. Children, Young People and New Media Conference, Centre for the Study of Children, Youth and Media Institute of Education, University of London, 26–29 July.
- Brown, S. A., Venkatesh, V. (2005). Model of Adoption of Technology in Households: A Baseline Model Test and Extension Incorporating Household Life Cycle, *MIS Quarterly*, Vol. 29, No. 3 (Sep., 2005): 399-426
- DiMaggio, P., Hargittai, E. (2001). From the ‘Digital Divide’ to ‘Digital Inequality’: Studying Internet Use As Penetration Increases, Working Paper #15, Summer 2001.
- Gunkel, D. (2003). Second thoughts: toward a critique of the digital divide, *New media & society*, Vol. 5(4, SAGE Publications, London): 499–522.
- Hacker, K., Mason, S. (2003). Ethical gaps in studies of the digital divide, *Ethics and Information Technology* 5: 99-115.
- Hasebrink U., Livingstone, S., Haddon, L., Görzig, A., Ólafsson, K. (2009). Comparing children’s online opportunities and risks across Europe: cross-national comparisons for EU Kids Online (2nd edn), London, London School of Economic and Political Science.

⁵ This type of trust was measured as a balance between the children’s opinion about what were “good” and “bad” things online.

- Heim, J., Brandtzæg, P.B., Hertzberg Kaare, B., Endestad, T., Torgersen, L. (2007). Children's usage of media technologies and psychosocial factors, *New Media Society*; 9: 425.
- Hindman, D., B. (2000). The Rural-Urban Digital Divide, *Journalism and Mass Communication Quarterly*; Autumn 2000; 77, 3; ABI/INFORM Global: 549.
- Hüsing, T. (2004). The Digital Divide in Central and Eastern Europe - An Empirical Overview, *Digital Divide*, [Review of Sociology of the Hungarian Sociological Association](#), Volume 10, Number 2 (11), 29 November 2004: 5-15.
- Livingstone, S., M. Bovill (eds) (2001). *Children and Their Changing Media Environment: a European Comparative Study*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Livingstone, S., Haddon, L. (2009). *Kids online. Opportunities and risks for children*, The Policy Press, Bristol
- Livingstone, S., Haddon, L., Görzig, A., Ólafsson, K. (2011). *EU Kids Online Final Report* (September 2011), <http://www2.lse.ac.uk/media@lse/research/EUKidsOnline/Home.aspx> (last consultation 1 November 2011).
- Pfell, S. (2008). *Die digitale Spaltung und ihre globalen Auswirkungen*, GRIN Publish.
- Selwyn, N. (2004). Reconsidering Political and Popular Understandings of the Digital Divide, *New Media Society* 2004; 6: 341.
- Steyaert, J. (2002). Inequality and the digital divide: myths and realities. In S. Hick & J. McNutt (Eds.), *Advocacy, activism and the internet* (pp. 199-211). Chicago: Lyceum Press.
- Stiakakis, E., Kariotellis, P., Vlachopoulou, M. (2010). From the Digital Divide to Digital Inequality: A Secondary Research in the European Union, in A.B. Sideridis and Ch. Z. Patrikakis (Eds.): *e-Democracy 2009*, LNICST 26: 43–54.
- van Deursen A.J.A.M., van Dijk, J.A.G.M. (2009). Improving digital skills for the use of online public information and services, *Government Information Quarterly*: xxx–xxx.
- van Dijk, J., Hacker, K. (2000). The Digital Divide as a Complex And Dynamic Phenomenon, Paper presented at the 50th Annual Conference of the International Communication Association, Acapulco, 1-5 June 2000.
- van Dijk, J. (2000). Widening Information Gaps and Policies of Prevention, in K. Hacker & J. van Dijk (Eds.) *Digital Democracy, Issues of Theory and Practice*. London, Thousand Oaks, New Delhi: Sage.
- van Dijk, J. (2008). The Digital Divide in Europe, in *The Handbook of Internet Politics*, Routledge, London and New York.
- Wartella, E.A., O'Keefe, B., Scantlin, R. (2000). *Children and Interactive Media. A Compendium of Current Research and Directions for the Future*: New York: Markle Foundation.
- Wilson, K., R., Wallin, J. S., Reiser, C. (2003). Social Stratification and the Digital Divide, *Social Science Computer Review* 2003; 21: 133.