



Co-funded by the European Union



THE LONDON SCHOOL
OF ECONOMICS AND
POLITICAL SCIENCE

EU Kids Online

What Do We Know About Children's Use of Online Technologies?

A Report on Data Availability and
Research Gaps in Europe



**European Research on Cultural, Contextual and Risk Issues
in Children's Safe Use of the Internet and New Media (2006-2009)**

**A project funded by the EC Safer Internet Plus Programme
– <http://ec.europa.eu/saferinternet>**

www.eukidsonline.net



EU Kids Online

What Do We Know About Children's Use of Online Technologies? A Report on Data Availability and Research Gaps in Europe

Editors

Elisabeth Staksrud, Sonia Livingstone and Leslie Haddon

Contributors

Joke Bauwens, Petter Bae Brandtzæg, Cecilia von Feilitzen, Cédric Fluckiger, Maialen Garmendia, Barbara Giza, Jos de Haan, Leslie Haddon, Veronika Kalmus, Metka Kuhar, Claudia Lampert, Sofia Leitão, Benoit LeLong, Sonia Livingstone, Jivka Marinova, Céline Metton, Kjartan Olafsson, Cristina Ponte, Pille Pruulmann-Vengerfeldt, Manfred Rathmoser, Elisabeth Staksrud, Gitte Stald, Václav Štetka, Liza Tsaliki, Panayiota Tsatsou, Patti Valkenburg, Anda Zule-Lapima

This is a report from the EU Kids Online network.
For a complete list of participants, see Annex B

EU Kids Online Deliverable D1.1 Data Availability (Short version)

For the full version of this report, see www.eukidsonline.net

EC Safer internet plus Programme

Contract number: SIP-2005-MD-038229

June 2007

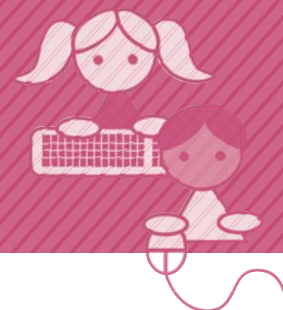
European Research on Cultural, Contextual and Risk Issues in Children's Safe Use of the internet and New Media

EU Kids Online is a project funded by the EC Safer internet plus programme (http://ec.europa.eu/information_society/activities/sip/index_en.htm) from 2006-2009. It examines research carried out in 18 member states into how children and young people use the internet and new media. This three-year collaboration aims to identify comparable research findings across Europe and to evaluate the social, cultural and regulatory influences affecting both risks

and children's and parents' responses to them, in order to inform policy. It will chart available data, indicate gaps and identify factors that shape the research capability of European research institutions. Finally, it will examine methodological issues relating to cross-cultural analyses and the study of children's online experience in order to develop a best practice guide to research. For more information see www.eukidsonline.net

Contents

1. Introduction	1
1.1 The importance of empirical research	1
1.2 Identifying the available research	1
1.3 This report	1
1.4 Work package 1: Data availability	1
1.5 The Online Data Repository	2
2. Availability of research	3
2.1 How much research is available?	3
2.2 In which countries is research available?	3
2.3 How many research studies are multi-national?	4
2.4 Are research findings publicly accessible?	5
2.5 What language is research published in?	5
2.6 A note on the limitations of the selection process	5
3. Patterns of research	6
3.1 Age of children	6
3.2 Topics researched	6
3.3 Risks encountered	7
3.4 Funding and origins of research	7
3.5 Academic disciplines	8
3.6 Research methodology	8
4. Summary and conclusions	10
4.1 Key features of the available research	10
4.2 Significant gaps in the evidence base	11
4.3 Emerging issues and challenges	12
Annex A: EU Kids Online	14
Annex B: Network Members	15
Annex C: National Reports	16
Endnotes	29



1. Introduction

1.1 The importance of empirical research

Across Europe and beyond, children and young people are going online in ever greater numbers and for ever more activities: 50 per cent of children (<18 years old) in the EU25 have used the internet, rising from just 9 per cent of those under six to one in three 6-7 year olds, one in two 8-9 year olds and more than four in five teenagers aged 12-17.¹ Cross-national differences are substantial, ranging from less than a third of children in Greece and Bulgaria to over two thirds in Estonia and Denmark. Widespread use of the internet and online technologies, particularly among children and young people, affords many opportunities but also risks.

There is growing agreement that the activities of multiple and diverse stakeholders are required to promote safer use of the internet and online technologies, to protect children and young people and to empower parents and teachers with online safety tools. It is also agreed that this approach should be evidence-based. Research is needed to chart which children have access to what technologies, to understand the incidence of risky practices and of parental regulation. It can also contextualise use and risk-related findings, so that we understand how and why some children encounter certain risks and with what consequences. Last, research can target awareness-raising and other interventions towards particular age, demographic or national groups.

In a European context, research must be cross-national if it is to support understanding of how and why children have different experiences online in different countries. Comparative research can also support multiple stakeholders in working together to ensure that parents and children receive up to date, comprehensible information, tailored to the modern family (in all its diversity), appropriate to social mores (in all their cultural variation), and accessible to all (despite economic and education-based stratification).

1.2 Identifying the available research

To inform this agenda, research teams across Europe, from diverse institutions, disciplines and perspectives are conducting many kinds of research. But keeping track of this research is a demanding task. Those who are not active researchers may lack the expertise required to identify, interpret and evaluate available research. Those working in one country or language may struggle to use research conducted elsewhere. Those with the power to commission research in one country would benefit from knowing what has proved useful in another.

For these reasons, a bridge is required between the specialist domain of empirical research and the policy imperatives of safer internet initiatives. EU Kids Online is a thematic network designed to bridge research and policy contexts by examining European research (national and multi-national) on cultural, contextual and risk issues in children's safe use of the internet and online technologies (see www.eukidsonline.net).

EU Kids Online focuses on the intersection of three domains:

- Children (mainly up to 18 years old), their families, domestic users;²
- Online technologies – mainly but not only the internet; focussing on use and risk issues;

- European empirical research and policy, prioritising the 18 countries in the network.

1.3 This report

This report³ asks what empirical research already exists, is ongoing, or is still needed. It does not present the findings of the research itself; there are no new empirical findings to be found here. Rather, this report identifies the available empirical research across Europe regarding children's access to and use of the internet and new online technologies. Thus, for those seeking new research, this report points out what there is and where to find it.

Specifically, the report notes patterns and biases in the kinds of research, both qualitative and quantitative, that have been conducted. It examines whether more or different kinds of research have been conducted in different countries, or for different age groups, or regarding some aspects of internet use compared with others. It offers an assessment of data comparability. Last, it pinpoints key gaps in the evidence base.

Our anticipated audience is broad, encompassing all those concerned with empirical research on children's online risk and safety, as well as the broader field of European comparative social science and policy. As we provide an efficient overview of key trends in the empirical research base, we hope this report will be read by research users – researchers themselves, those who commission and fund research, policy makers and others working towards a safer internet for the public.

While this report addresses data availability in Europe, it was compiled in part from a series of national reports. These are included in Annex C.

Note that this report exists in two forms: the shorter, printed version includes summary versions of the national reports, and does not include full tables. The full version of this report includes all tables containing the data referred to in the shorter report; it also includes the collection policy for the Data Repository and longer versions of the national reports. Both versions can be freely downloaded from www.eukidsonline.net.

1.4 Work package 1: Data availability

This report is the second of two deliverables for Work Package 1: Data Availability. The aims of this work package are:

- The creation of an ongoing repository of data links to inform and publicise available data.
- The identification and overview of quantitative data in 18 countries.
- The identification and overview of qualitative data in 18 countries.
- Analysis of gaps in the evidence base.
- Assessment of data comparability.

The first deliverable, launched in September 2006, is an online Data Repository (D1.2). The contents of the repository, which is described below, form the basis of the present report.

This work package is conducted in parallel with other work packages (see Annex A). Indeed, it provides the basis on which the others build, for only after identifying the available research can we contextualise the research (WP2), compare findings across countries (WP3), evaluate the methods used (WP4) and develop policy recommendations (WP5).

EU Kids Online outputs are the collective effort of the EU Kids Online network. Network members meet several times per year and work in close contact electronically in between. The editors then integrate contributions and produce the final text for each report.⁴

1.5 The Online Data Repository

This database contains entries that identify and codify recent and ongoing empirical studies regarding children and the internet and online technologies in Europe. The aim is to provide a public resource for researchers and practitioners in which studies are identified and information about them can be readily searched and accessed. The Data Repository is online at www.eukidsonline.net.

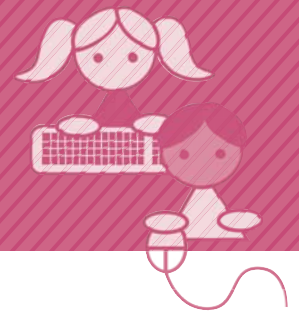
The collection policy describes what is included and not included in this repository. In brief, these are as follows:

- The unit of analysis is an empirical research project (not a publication) conducted in Europe
- The report must be available and read by the coder, with sufficient methodological details to evaluate its quality
- Relevant research includes, as a priority, (a) empirical projects concerning children + internet/online, (b) research on risks experienced by children online, (c) research on mediation or regulatory practices (by parents, teachers, etc) for children's online activities. It also includes, with more partial coverage, (d) research on parental internet experiences and (e) research on children's use of other technologies
- Definitions: (a) Europe includes the EU25, with priority for the 18 nations of EU Kids Online, (b) children includes those under 18 years old, (c) online includes internet, online games, online mobile, e-learning, etc.

Certain quality control criteria have guided these decisions, though we cannot guarantee that all research included here is of the highest quality. Each study (or project) is described according to its main features – sample, methods, topics researched, countries studied, publication details, etc. These features, or a free text search, may be used to search the database.

The present report analyses entries in the repository entered by January 2007. These number 235 in total. While we have attempted to be as comprehensive and inclusive as practicable, the EU Kids Online network will continue to update the repository with additional and new entries at regular intervals over the next two years. The final project report (due June 2009) will thus update the tables and findings in the present report.

2. Availability of research



2.1 How much research is available?

The EU Kids Online network has identified 235 separate research studies and entered these into the online data repository. Some studies are small, producing a single report; others are substantial, resulting in a series of publications. In many studies, the majority in our repository, children and the internet are the central focus, but in some, they are a minor part of the research.

For example, surveys of public adoption of media or technology or consumer goods include some questions about internet access and use, but may not include much detail. Surveys of 'the population' generally exclude children but may include those 14+ or 16+, thereby providing some data on older teenagers' internet use but not for younger children. Questions may have been commissioned on an omnibus survey, resulting in a few carefully targeted questions relevant to children and online technologies but providing little contextualisation.⁵

Given the rapid pace of change in the internet and online technologies and services, as well as in children's practices online, some of the research is becoming somewhat out of date, even though conducted within the last few years.

The majority of the studies collected researched children directly, whether collecting information from them or observing them in some way. There are also studies of parents, teachers or other adults (which may include some parents) who act as informants about children's behaviour or else provide information that allows us insights into how they interact with children (eg, parents' concerns about risks).

Although the calculations are not shown here, it should also be noted that there is a positive correlation between national population and number of studies identified, with larger countries sustaining a larger body of empirical research than smaller countries.

Several national reports noted that even if the internet and internet studies are well established, the issue of children and risk remains a relatively recent addition to the public policy agenda (see Annex C). Note too that for a few studies, research is sub-national (eg, in Belgium, where the repository includes studies of French Wallonia or of Flemish speaking Flanders but not the smaller community of German speakers).

We considered the possibility of grouping countries by region, though it appears that no standard regional groupings are agreed within Europe (this will be one focus for Work Package 3). A tentative grouping, below, suggests that most research is conducted in Northern Europe, that the considerable volume of research in the Nordic region might reflect the extent of internet diffusion, given the relatively small population sizes, and that less research has been conducted in Central and Southern Europe, though there are exceptions:

- *Southern Europe:* Greece (29), Portugal (19), Spain (14), Slovenia (11)
- *Nordic region:* Denmark (19), Iceland (7), Norway (17), Sweden (27)
- *Northern Europe:* Belgium (33), Estonia (17), France (15), Germany (33), Netherlands (15), UK (50)

2.2 In which countries is research available?

Recent empirical research on children and online technologies, mainly concerning the internet, was identified in all 18 countries in the EU Kids Online network. However, the conduct and availability of research is unevenly spread across Europe.

There are many reasons why more research exists in some countries than others (and pursuing the reasons for such variation will be a focus for EU Kids Online's Work Package 2). These may include the fact that mass diffusion of the internet is itself more recent in some (eg, the Czech Republic) than others (eg, Germany). Linked to this, research activity depends on a critical mass of interested researchers able to work on a topic. Lack of funding options is another consideration (one study in Bulgaria was paid for by the British Embassy).

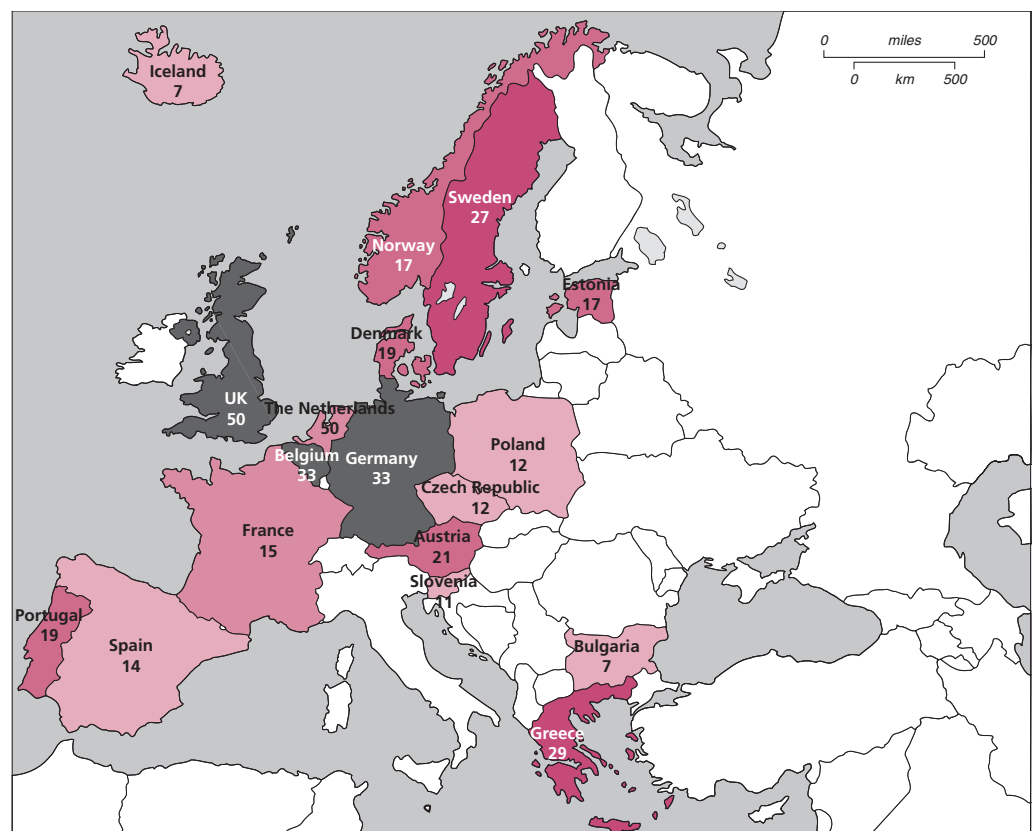


Figure 1: Number of studies in each EU Kids Online participating country⁶

- **Central Europe:** Austria (21), Bulgaria (7), Czech Republic (12), Poland (12)

In the data repository, some research was identified from 12 further European countries⁷. This can only be indicative as the aim was not to be comprehensive for countries other than the 18 included in the EU Kids Online network.

Research conducted outside Europe is sometimes influential within Europe, and it also helps to provide an 'outside' view, especially when determining what is specifically European and what is more general to children's internet use. Thus, although not within the remit of the online data repository, references to such research are collected as part of our ongoing review of the literature (see www.eukidsonline.net). Most notable is research conducted by Pew Internet, valuable for its high quality, timely and useful surveys of youthful internet use. Their findings are widely cited in European policy debates, and their phrasing of questions is sometimes adapted for survey questionnaires within Europe.

2.3 How many research studies are multi-national?

The earliest multiple-country study in the field of children and the internet is SAFT, whose questions provided a basis for the pan-European Eurobarometer study among others. Mediappro involved fewer countries but took place at roughly the same time as Eurobarometer.

Most of the other studies examined are single country studies, although 12 of the 235 empirical studies were conducted in more than one country (one EC-funded study involved most participating countries but was of the internet in general rather than children in particular and one involved many EU and non-EU countries but was focused specifically on freedom of expression and online censorship). Thus the vast majority (95 per cent) are single-nation studies, reflecting the national basis on which research commissioning and research funding is generally organised.

We note that, in practice, team members sometimes discovered that, however much we attempted to anticipate all possibilities in advance, there was more than one way to code the details of a study, especially for multinational studies.

The multi-national studies identified regarding children and the internet/online technologies include the following:

- **SAFT** (Safety Awareness Facts and Tools), is an awareness project initiated in Norway and funded by the EC Safer internet Action Plan. This study explored 9-16 year old children's activities online, using a self-completion survey in classrooms; it also surveyed (by telephone) parents' awareness of children's use and risks. It was conducted in 2003-4 in Norway, Sweden, Denmark, Iceland, and Ireland. It has been partly replicated in Singapore, the Netherlands, Austria and Finland. The survey was replicated in 2006 in Norway for parents and children and in Ireland only for children. It covered use of technology, electronic games, seeking information (including for schoolwork), parental knowledge and supervision, email accounts, chatting, illegal behaviour, internet education and safety, mobile phones, offensive material, submitting personal information, face-to-face meetings and other areas. See www.saftonline.no/PressReleases/2881

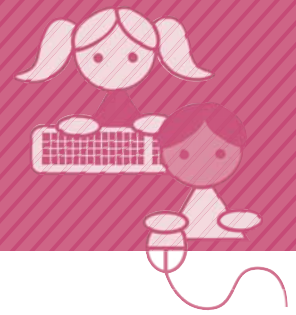
- **Eurobarometer.** Based on some of the SAFT questions and funded by the EC, Eurobarometer surveyed parents/carers⁸ in autumn 2003 in the 15 old member states⁹ (EU15) and at the beginning of 2004 in the ten new member states¹⁰ just before they joined. A second survey of all these countries (EU25) plus the acceding and candidate countries¹¹ was carried out in 2005. The surveys covered use of the Internet, self-assessed expertise, children's use of the internet, location of that use, children's owning a mobile phone, whether children have encountered harmful or illegal content, the use of filtering/blocking tools, whether parents sit with children during internet use, parental rules and various questions relating to awareness of information about the safer internet. See http://europa.eu.int/information_society/activities/sip/eurobarometer/index_en.htm

- **Mediappro.** This survey, also EC funded, was conducted by researchers who had worked on the previous 'Educaunet' study (Belgium, Denmark, France, Greece, Portugal and the UK) in 2005. These were joined by new members from Estonia, Poland and Italy. The core question was: How do young people across Europe appropriate the internet and new network media? Paper questionnaires were completed in classrooms across nine countries by 7393 children. In addition, 25 qualitative interviews were conducted in each country. Equivalent research was also conducted in Montreal, Quebec. See www.mediappro.org/

- The **World internet Project** (WIP) is an international, collaborative study looking at the social, political and economic impact of the internet and other new technologies. It has more than 20 partners in countries and regions all over the world, including Singapore, Italy, China, Japan, Hong Kong, Macao, South Korea, Sweden, Germany, Great Britain, Spain, Hungary, Canada, Chile, Argentina, Portugal, Australia, Bolivia, India, Iran, Estonia and the Czech Republic. This study thus includes some European countries, and while many of the surveys address adults only, some defined their sample as 14+ years and so include children (eg, the UK study, OxiS). See www.worldinternetproject.net

- **Children and Their Changing Media Environment** was a 12 European nation comparison of children and young people's access to and use of old and new media in 1997-8. It included Belgium, Denmark, Finland, France, Germany, Israel, Italy, Spain, Sweden, Switzerland, The Netherlands and the UK. Combining qualitative and quantitative methods, it asked how children aged 6-17 years old engaged with their changing media environment in the context of new media diffusion, patterns of parenting, school, peer group and culture. See Livingstone and Bovill (2001).

- Other examples include the **Unsafe Survey** of some 21,000 children and teenagers across Europe for Safer internet Day 2007. This provides a snapshot of experiences regarding online use, privacy, risk and safety practices. See www.saferinternet.org



2.4 Are research findings publicly accessible?

By far the most important means of accessing reports of empirical research studies is via the internet – over half of all studies are available online. One in ten studies can be accessed through published book chapters, journal articles, reports for purchase or reports obtainable on request. Studies for which only few details were available and which were only available for purchase were excluded. Since academic publication, especially in journals, generally includes a formal process of anonymous peer-review and editorial scrutiny and guidance, the high proportion of studies that do not undertake this process successfully is of concern for the quality of work in this field (though we note that some reports do benefit from a process of peer review). One problem is that many, though not all, reports are largely descriptive, valuable as a timely snapshot of online use, but lacking the theoretical framework or critical evaluation of research required for a deeper analysis or interpretation of findings.

Most problematically, 12 per cent of the empirical studies are publicly available only in summary form, thus omitting important information needed to evaluate the research and understand its findings. For example, these included summaries in which the number of respondents or the date of fieldwork was missing. Even in some full reports, key information was missing – who funded the study, for example, or the mode of survey administration (eg, telephone, face-to-face or other). Sometimes the report did not specify the age of the participants, but just said that they were from primary schools or secondary schools (which can mean different ages in different countries).

More encouragingly, however, 73 datasets (from the 235 studies) are publicly available (either online or on request), though more datasets are not available. This was true for each form of funding: for example, for National Government funded studies, in ten cases the dataset was available but in 53 studies they were not; for the national research councils, the ratio is 7:29.

2.5 What language is research published in?

Research users must not only be able locate a research report, they must also be able to read it. While the norm is for reports to be published in the national language(s), in some countries there is also a growing trend towards publication in English in addition (either the full report or a summary). This is particularly the case in the Nordic countries, the Czech Republic and Greece.

2.6 A note on the limitations of the selection process

In scoping the nature and range of empirical studies to be included within this report, boundaries had to be drawn. These are outlined in the annexes to the full report (see www.eukidsonline.net). As in any such exercise, these boundaries were drawn according to the EU Kids Online remit, our interpretation of that remit as reached through network deliberations, and the practicalities of defining, identifying and coding research studies and reports. Inevitably, some may disagree with our decisions; others would have preferred different solutions. Moreover, the task of identifying and coding available research continues as the research enterprise itself continues.

Hence, we urge that the exact numbers or percentages noted in this report are interpreted with some caution, and that emphasis is instead placed on the broad trends identified and on the particular patterns of findings.

3. Patterns of research

3.1 Age of children

The EC defines children using the legal definition of ‘minors’ – those under 18 years old. Media provision and regulation often defines children as those younger than 12 or 15. Child protection considerations concern the vulnerable, a category which may extend into young adulthood. As noted earlier, research is often conducted on the adult population, including older teenagers because they are ‘researchable’ (ie, reliable respondents, without necessitating different methods or demanding special ethical procedures). Other research targets children and young people because they are the focus of interest. Educational research (including that focused on the use of information technologies) may target primary and/or secondary school pupils.

The majority of research on children’s use of the internet and online technologies is conducted on teenagers. The lower number of studies on the 18+ group reflects the focus of EU Kids Online on under 18s, rather than a paucity of research on older ages, for most of these studies are those that capture both children and adults (eg, respondents aged 12-19).

There is a rough correlation between the proportion of young people using the internet and the amount of research on them – recall that in the EU25, those who have used the internet is 9 per cent of those under 6, one in three of 6-7 year olds, one in two of 8-9 year olds and more than four in five teenagers aged 12-17.¹² But since use among younger children is growing fast, and since vulnerability in terms of maturity, or available coping strategies, may be greater for younger children (even though incidence of risk is higher for teenagers), children younger than 12 years old must surely represent a priority for future research.

3.2 Topics researched

What topics, or questions, do these research studies address? What topics receive more attention in one country than another, or for one age group compared with another? Research questions may be theory-led, policy-led or problem-led, and all three of these sources of questions may vary by national contexts, resulting in Europe-wide variation. Each study was coded for its inclusion of a wide range of possible topics, and the overall evidence base can be characterised as follows.

Access and use: The most researched topics were online usage, followed by access and then interest and activities. Discussions amongst the national teams suggest that most research on access concerned access via PCs, with little on mobile phone or games machines as platforms for internet access. All participating countries have researched the main issues of internet use (a topic in over half of the studies in all countries) and access (usually well covered in each country). However, there seemed to be little research on why some children lack access. As regards use, discussions at workshops suggested that there was less available material on the newest kinds of use, such as blogging and podcasting. In all, the research needs to catch up with the technology and with the policy agenda.

Online activities: The next band of topics that received more attention was children’s online skills, children’s social networking online and gender differences in relation to experiences of the internet. These were followed by children playing online games, the effects on children of going online, children’s concerns and frustrations and children’s identity play. The least frequent topics were civic and political participation, interpreting online content, creating online content, seeking advice online and strategies for finding things. Looking across the participating countries, these topics were less common but still fairly well covered, with the balance of interest in activities and skills two varying a little by country.

Media literacy: Regarding the interpretation of online content, creating online content, children’s concerns and frustrations and strategies for finding things online, we start to see that some countries have research gaps. For example, Bulgaria, the Czech Republic, Germany, Slovenia, the Netherlands have nothing on interpreting online content. In the case of some small countries with fewer overall studies this is perhaps understandable (eg, Bulgaria, Czech Republic, Slovenia).

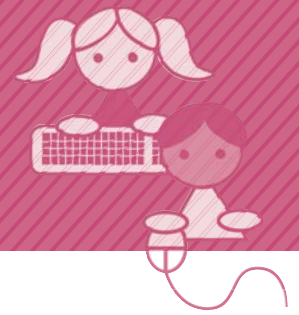
It is perhaps more surprising to see that countries with a generally stronger research tradition and quite a number of studies overall have such gaps (eg, in the Netherlands, several key areas are not covered in studies, and to a lesser extent this is also true of Germany). In contrast, although Iceland has comparatively fewer studies overall, they are more comprehensive, covering many topics. The UK has a high percentage and the highest absolute number of studies addressing children’s concerns and frustrations.

Identity play: Online gaming, identity play and seeking online advice seem to have attracted more attention proportionally in the Nordic countries, although in terms of numbers of studies the UK and Belgium have also addressed the first two of these fields repeatedly.

Participation: The Nordic countries have also shown relatively more interest in civic/political participation and social networking online, although in terms of numbers of studies, the UK has covered social networking a good deal. It is noteworthy that civic/political participation is not covered at all or covered very little in many of the other countries.

Little researched topics: Quite a few countries have little research on learning online (Bulgaria, Czech Republic, France, Iceland, Poland, Slovenia, the Netherlands), which is perhaps surprising given the overall importance of education as a research discipline and area of study in relation to children and the internet. The studies of effects tended to look at short-term effects. Obviously it is difficult to plan for the long term but nevertheless society needs to consider what type of data should be collected now in order to make longer-term comparisons.

Gender: All participating countries have paid attention to gender, although the degree to which they do so varies, Sweden, Denmark and Spain having higher percentages of studies in this field. Finally, regarding studies of the consequences of going online, it seems that most countries had some studies addressing this question (except for Poland). In terms of numbers of studies, UK, Norway and Belgium were the highest.



Parental mediation: There is less research on parents' experiences of the internet and how they mediate their children's experiences. The most common topic here was parental styles of regulating their children's internet use (less research examines children's responses to regulation, with some notable exceptions).

However, all countries had several studies concerned with parents' knowledge of their children's internet usage and parents' style of regulating their children's use. In general there were fewer studies in each country regarding children's response to regulation, and some countries did not cover this at all. Nor was it just the countries with few overall studies that did not cover this topic (eg, it was not addressed in Austria, Estonia, Greece and the Netherlands). The majority of countries had some data on parents' media/information literacy.

Further, all participating countries had some studies of parents' awareness of online risks, with quite a few studies in the UK on this topic. There was more mixed coverage of the effectiveness of filters, with about half the countries researching this.

Lastly, a majority of participating countries had studies that addressed parents' attitudes to technology and parents' concerns about online technologies, with the UK having the greatest number of studies in both cases. All countries had (usually several) studies examining parents' competencies, with the UK again having the most studies.

3.3 Risks encountered

EU Kids Online was specifically interested in identifying research on online risk in relation to children. The available research was coded for its inclusion of a range of possible risks. These risks were classified into four broad categories (frequencies of studies are in brackets):

- Content risks – exposure to illegal content (34 studies), exposure to harmful content (43), encountering sexual/violent/racist/hate material (38), misinformation (18) (problematic) user-generated content (14), challenging content (eg, suicide, anorexia, drugs, etc.) (8)
- Contact risks – contact with strangers (44), cyberbullying (28)
- Commercial risks – advertising/commercial exploitation (21), illegal downloading (20), gambling (9)
- Privacy risks – giving out personal information (37), invasion of privacy (24), hacking (14)

The most researched risks are content-related and the least researched risks are commercial.

There is some national variation in research on risks. In the UK, approximately half of the studies identified addressed online risks, whereas there was little research on risks in some countries like Estonia. The German report noted that there was surprisingly little research on risk. Several reports (eg, Greece, Bulgaria, Belgium) noted that the area of risks online was relatively new in their countries.

Nonetheless, content risks have been researched at least minimally in all countries, with more detailed information available in some countries (eg, Norway and the UK). A similar pattern holds true for contact

risks, although Estonia had no studies and several countries had only one. Norway and Denmark had slightly more studies of commercial risks, and many countries had only one such study (with none in the Netherlands). Finally, in the UK and Norway there were more studies of privacy risks, several countries had only one and there were none in Estonia and the Netherlands.

The Norwegian report noted that research on risks tends to be more concerned with mapping and quantifying risks than asking why children exhibit risky behaviour online. And there is little on the consequences of risk experiences online.

Do the risks researched vary by age of respondent? Of the 18 studies researching very young children (0-5), few have addressed risk. For 6-8 year olds, there is more work on privacy and content risks, though less than for older children and teenagers, and there is little on contact risks. Contact risks are particularly researched for 12-17 year olds, with less attention to these risks for over 18s. For those aged 9+, privacy is a concern for research across the age range, as are content risks (which receive more attention).

Overall, given the policy attention currently being paid to questions of online risk and of both children's and parents' media literacy (or safety awareness), the scarcity of research on these issues is noteworthy. Though this report is unable to consider the nature and depth of the research conducted, it appears that in many countries, research is relatively 'thin' in terms of considering forms, contexts and consequences of online risk exposure among children in Europe.

3.4 Funding and origins of research

The source of funding can shape the research agenda (its relation to policy, commercial and academic concerns) and the specific questions addressed. It may also influence the nature of the research. Commercial market research often emphasises the latest figures, providing a descriptive snapshot of the current situation without a framework for understanding the phenomenon. Research council funders would expect a theoretical framework to be provided and require the research to be accountable and accessible (eg, the researchers should supply the data, questionnaires, etc. on request). Commercial (and some other types of) research might stress what is practical on a budget whereas academic research more usually stresses what is theoretically important.

For some studies (15 studies, 6 per cent) the funding source could not be determined. When they could, National Government studies were the largest group, followed by those funded by commercial companies. National research councils, research institutes, the EC, and PhD/Masters theses constituted the next most important grouping of funders. Other funders included regulators, charities (eg, youth organisations, NGOs such as Save the Children), public broadcasters, regional Government, trade associations and consumer organisations (and one church funded study).

When examined by country it seems that for all participating countries, some studies are funded by the Government directly (eg, a ministry) or by the EC; in some countries this accounts for half of all funding. Fewer studies are funded by national research councils, and in some countries they play no role (whereas in the Netherlands they accounted

for a third of studies). The regulator is mainly important in Norway and the UK, and in the majority of countries plays little role.

In most countries trade associations are research funders, while commercial companies (ISPs, commercial broadcasters, etc) are more important in some countries (eg, Germany, UK) than others. Charities play a significant role in the UK but have not funded studies in most other countries. The influence of research institutes varied, ranging from funding roughly a quarter of studies in some countries to funding no research in others.

The significance of PhD and masters' theses varies. In part, this reflects the collection policy – for example, there were so many other studies to be found in the UK that less effort was made to track down this source. But clearly this type of research was important in Portugal, then Sweden and Austria. Public broadcasters only funded a few studies, notably in the UK and Belgium. Consumer organisations did not fund studies except for two in Belgium. Other NGOs funded just a few studies in some countries.

Lastly, regional government funded a few studies in a few countries. The Church only funded one study (in Austria). Within Government-funded studies there is also some variation, with education ministries being likely to fund educationally-oriented research such as learning online (eg, in the Netherlands).

Studies funded by the government, the regulator, research institutes and the national research council do consider some risks, but most are more orientated to the potentially positive aspects of the internet (eg, for learning, creating content, social networking, etc). Similarly, academic research considers some risk but generally seeks to contextualise this within a broader focus on contexts and consequences of use. Whatever the focus, most studies generally collect basic information about internet access, usage, skills and interests.

It seems that governments are the main funder for most research topics. Companies are also prominent in many areas, but not in all topics (eg, interpreting online content and identity play). PhDs and Masters theses seem to focus more on certain topics: social networking, identity play, and interpreting online content.

Specifically as regards risks, governments are the most important funders, followed by the EC, Research Councils and companies. The regulators and charities are also important, overall the latter being more focused on contact risks. Several countries had studies specifically funded by participants associated with, but not always funded by, the Safer internet Plus Programme (Czech Republic, Spain, Belgium).

3.5 Academic disciplines

Different academic disciplines contextualise the data differently. They ask different questions and work with different frameworks of analysis. For example, psychology often focuses on attitudes, beliefs, behaviour and emotions while sociology examines the importance of contexts of family, peers, school, etc. In part, the national picture for research on children's online use and risk may vary because in different countries this field is incorporated within different disciplines – sociology, child development, pedagogy, media studies, and many others.

However, with access only to the research reports, the EU Kids Online network decided it was too difficult to identify disciplinary backgrounds systematically, especially for multidisciplinary project teams.

It did appear, however, that much of the research is conducted by those in education departments, often informed by a background in information or psychology. For example, this typifies the Portuguese research; in the UK media studies is equally common, though this field is underdeveloped in the Czech Republic. The notion that different disciplines can lead to different foci was well exemplified in the case of Belgium: media and communication research tended to deal with access, use, skills and consequences; sociological studies were more interested in social inequality, stratification, social pressures relating to the internet; and pedagogy dealt mainly with risks and strategies to cope with this.

For research conducted by market research companies, typically commissioned by commercial or child welfare agencies or conducted by the market research companies themselves, there was no generally discernable research or disciplinary framework guiding the study; rather, these studies repeat tried-and-tested questions, or questions that arise from public or policy debates, resulting in a snap-shot of current trends but with less value in terms of generating a longer term understanding of children's relation to the internet.

3.6 Research methodology

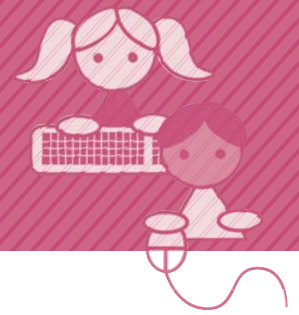
Quantitative and qualitative research methodologies make different assumptions, use different methods, rely on different criteria for reliability and validity, and produce different kinds of findings (as developed in Work Package 4).

Broadly, quantitative research makes a claim to be representative of the population, it asserts that it uses reliable and valid measuring tools and promises statistical analysis of relationships between variables. Qualitative research does not claim to be representative, but instead seeks to capture the diversity of a phenomenon. It does not work with numbers but works with observations and verbal data, seeking richness in the analysis and providing a voice to those being researched.

For some reports, often where only a summary is available, it was not possible to determine many details of the methods used (3 per cent). For the most part, methods could be classified as either qualitative, quantitative or some combination thereof. Quantitative research predominates, followed by a combination of quantitative and qualitative methods and, only slightly less common, qualitative research.

Quantitative research

Most quantitative studies are paper-self-completion, face-to-face surveys come second and telephone interviews third. The majority (70 per cent) of quantitative studies involve representative samples although this partly reflects the fact that these include general surveys of access and basic use. However, one has to be careful as regards what 'representative' means in this context. Commercial research often uses quotas for gender and age, though they may not be representative in other ways (though they



can be weighted to the national population). There are fewer random probability samples, because these are more expensive.

Sample sizes also vary, especially for PhD or Masters' theses, and they may not cover the entire nation (c.f. Belgian report). Note also that in some cases, it is schools rather than households or individuals that have been sampled (eg, Belgium, the Netherlands).

There are only two examples of a longitudinal study currently under way (both in the Netherlands), although there are examples where studies are repeated.

We noted earlier that internet access, usage and online interests and activities are well covered as topics: this may be because they represent standard topics in surveys. Therefore, quantitative studies dominate in relation to these topics, as do skills and gender differences (this last, because information about gender is collected as standard in surveys).

Qualitative research

Purely quantitative studies are fewer as regards the topics of interpreting online content and identity play, which might well reflect the fact that qualitative research lends itself to investigating the meanings involved in these two topics. These were also two of the areas where PhD and Masters theses were important, and we suspect that many of these use qualitative methods because these are less expensive than surveys.

Overall, research that is solely qualitative appears to be chosen when an in-depth examination is required, when the research focus is on very young children (as noted above) and when the phenomenon is new and so requires an exploratory approach. The most popular qualitative method was in-depth interviews (rather than, say, ethnographic observations). Other methods included observation, creative experiments, high school essays, drawings, tests and discussions (see the Danish national report). The most important type of qualitative study was the in-depth interview, but observation, especially of younger children, is also important.

The PhD/masters' studies tended to be qualitative, the research by institutes was fairly balanced between qualitative and quantitative, but for all other types of funder, quantitative research predominated. Of the studies collected and examined, in only the Netherlands and Iceland are there no qualitative studies at all. Usually quantitative studies count for over half of the total number of national studies, apart from Denmark, France and Portugal, where a greater proportion of studies combine qualitative and quantitative approaches. For research on younger children, qualitative work is more often used, with rather less use of qualitative methods for older teenagers.

Further observations

Does children's age influence the choice of research method? It seems that a higher proportion of research on younger children is qualitative (typically, interview or observation-based). For older children and especially older teenagers, quantitative methods (typically survey methods) are more common. One may be puzzled by the use of quantitative methods with very young children, but recall that the studies

are coded in terms of the target age group – these studies could rely on surveys of parents reporting on their child's internet use.

The consequence of the bias towards qualitative methods with younger children, understandable as it is in practical terms, is that it becomes more difficult to estimate the frequency of certain practices or uses within the child population or to draw clear comparisons between age, gender or other groupings. The consequence of the relative paucity of qualitative methods with older teenagers is that the findings may lack contextualization or interpretation in terms of the experiences and perceptions of these young people themselves.

A number of national reports made points that may be more widely true across countries. The Portuguese noted that sometimes the research shows less reflexivity than one would have liked (eg, children's perceptions when adult researchers want to participate in children's activities). The Czech team observed that many studies were descriptive in character (eg, usage, access) with not as much depth as one would have liked. And the Belgian report pointed to the way that many studies focused on (self-reported) behaviour relating to the internet rather than the meanings of the online experience and how the ICT was embedded in everyday life.

4. Summary and conclusions

This report set out to identify the available empirical evidence regarding children and young people's access to and use of the internet and online technologies across Europe. It does not report on the findings or implications of that research, but our future reports will do just that.

It focused on research concerned with (a) children (up to 18 years old), as well as their parents/families and domestic users generally, (b) online technologies, focusing on issues of use and risk; and (c) the 18 countries in the EU Kids Online network (Annexes A and B).

The aim was to locate the research that exists, scope its main features and biases, identify the key trends and, especially, reveal gaps in the evidence base. This, we hope, is useful for a diversity of research users in academic, policy, funding and other organisations.

The report identified and discussed 235 separate research projects, selected and coded according to criteria of relevance and quality (see full version of this report at www.eukidsonline.net). Please note that our present purpose is to identify patterns and gaps, and that the work of EU Kids Online to locate further research, increasing the comprehensiveness of the repository, is a continuing process.

4.1 Key features of the available research

Though the scale and quality of research studies varies considerable, research exists in all participating countries regarding children and young people's use of the internet and online technologies. Its key feature may be summarised as follows.

A fast-growing but uneven evidence base:

- There is much more research in some countries (especially in Northern Europe) than in others, though there are exceptions.
- The research base is steadily growing and may be expected to grow further and faster in the coming few years.
- Most of the research identified concerns children directly. The majority of this is conducted with teenagers, mirroring the greater use of the internet by teenagers (compared with younger children) across Europe.
- There is also research on parents, teachers and other adults, relevant insofar as this is informative of children's online activities.
- The evidence base largely comprises single nation studies, though some multinational and pan-European research exists.

More research on access and use than on online risk:

- The most researched topics concern children's online access and usage, followed by investigations into a range of their online interests and activities – such research exists in all participating countries.
- Following this, fairly common topics are online skills, social networking, gender, games, consequences of internet use, children's concerns and identity play online.
- Research on parents' mediation of their children's internet use is sparser, but there is some research on parental styles of domestic regulation, on their knowledge, attitudes and concerns regarding

children's practices, and on their awareness of risk.

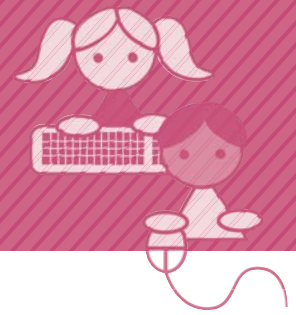
- Research on risk was categorised in terms of content, contact, commercial and privacy risks. The report revealed that such research as exists on risk focuses on content risks, especially exposure to illegal or harmful content, and violent or hateful content, though there is also some work on contact risks.

Research is mainly funded by national governments:

- The body of empirical work identified and discussed in this report has been mainly funded by national governments.
- Commercial companies (eg, in Germany), national research councils, research institutes and the EC itself are also significant funders, as are regulators in Norway and the UK.
- Indeed, European Commission funding, especially the initiative of the Safer internet Action plan, has generated a valuable body of multi-national studies that permit direct comparisons across countries.
- For countries where little research has yet been developed, participation in a multi-country study (eg, funded by the EC) can provide a valuable means of raising an issue within a national research agenda.
- Further, in countries where external funding is sparse, doctoral and masters' theses can be an important source of information (eg, Portugal, Sweden, Austria).
- The funding source varies by topic researched, with government sources funding a wide range of research topics, academic research being more concerned with the contexts and consequences of online use, commercial companies being more likely to research the negative than the positive dimensions of use, and regulators and charities (insofar as they do fund research), mainly focusing on risk.

Theories and methods:

- In terms of academic discipline, much research has been conducted by departments of education, information or psychology, though this varies considerable across countries, and is not always easy to determine from published reports.
- We suggest that multidisciplinary research teams can best generate a multidimensional picture of children's internet use in context, and we express some concern at the proportion of market-research conducted studies that remain descriptive rather than analytic.
- Choice of research methodology also shapes the available findings. Overwhelmingly, most research is quantitative, thus emphasising the frequency and distribution of certain activities across a population or sub-sectors thereof.
- Much less research is qualitative or multi-method in nature, meaning that we have less understanding of children's own experiences or perceptions or of the ways in which online activities are contextualised within their everyday lives.
- Non-academic projects are especially likely to be quantitative in nature, and in some countries, little qualitative research was identified



(eg, The Netherlands, Iceland) though in a few countries, multi-method research predominates (eg, Denmark, France, Portugal).

- Unsurprisingly perhaps, a higher proportion of the research on younger children is qualitative in nature.

Most research is readily available:

- The internet is itself the main route by which research findings are disseminated, easing the accessibility of research findings.
- However, relatively few studies are reported in high quality academic publications, and we note that typically these latter provide critical scrutiny via a process of peer review.
- In some cases, the absence of vital information makes it difficult to evaluate (or even include) a study.

4.2 Significant gaps in the evidence base

The 235 studies identified, when spread across 18 or more countries, a wide age range and many different research topics, make for many gaps in the evidence base. In the points below, we emphasise the most important of these, and hope this provides a guide to future research commissioning and conduct.

Note, however, that the absence of empirical research on a particular topic, for a particular group or in a particular country does not necessarily point to a significant gap. One country may learn from the experience of another. Occasionally, there is more research than really needed on one topic, making another seem neglected by comparison.

Uneven coverage by age:

- Children of primary school age, and even younger, are increasingly gaining access to the internet, yet most research concerns teenagers.
- Increasing the body of research on children younger than 12 is now a priority, since their activities may challenge their maturity to cope with unanticipated risk.
- Notably, disproportionately little of the research on younger children addresses questions of online risk.

Overwhelming focus on the fixed internet:

- Most research regarding online technologies is focused on the fixed internet. New, interactive, online media accessed via mobile, games console, convergent devices, etc raise new questions and challenges for research and policy.
- Much research also concerns the nature and use of websites rather than more interactive, peer-to-peer, multi-user applications accessed via convergent platforms and emerging technologies (ie, most evidence is largely focused on web 1.0 rather than web 2.0).

- As children gain access to the internet and online opportunities through other platforms than the PC, it will be vital that research quickly examines their practices, addressing questions of risk and safety, parental mediation and media literacy.

Issues little covered regarding children's online activities:

- There are particular gaps in the evidence base in some countries, mainly those in which research is overall rather sparse. Certain relatively neglected online activities require further research attention, specifically questions of
 - civic participation, important for redressing the supposed political apathy of youth
 - the interpretation and evaluation of online content, important for media literacy
 - content creation, important for identity, expression and creativity
 - certain kinds of search, eg, for advice.
- As regards media literacy for online technologies, the research is more informative regarding children's abilities to access and use online resources than it is for the important abilities to critically evaluate what they find or, indeed, to create content of their own choosing.
- There are some notable gaps in some countries:
 - research on the interpretation of, creation of, and frustrations with online content is particularly needed in Bulgaria, the Czech Republic, Slovenia and, perhaps more surprisingly, in Germany and The Netherlands, where otherwise there is a good body of research
 - the Nordic countries pay more attention to civic participation, communication and gender, though there are exceptions to this; these are all, surely, priorities for research in other countries
 - such research on social networking as exists appears concentrated in just a few countries (Sweden, the UK, Denmark, Norway)
 - many countries lack an evidence base regarding online learning, while entertainment activities seem more researched in Northern Europe than elsewhere.

Gaps in the evidence for exposure to online risk:

- Research on content and contact risks is lacking in some countries, and it requires updating and deepening in most or all countries.
- While there is a fair body of research on content, contact and privacy risks, there is much less on commercial risks. Yet, for audiovisual and other media, exposure to advertising, product placement, sponsorship and other commercial messages has long been of concern. This expertise should now be developed for children's exposure to online commercial content.
- Certain risks have still been relatively little researched, despite their importance on the public agenda. These include exposure to challenging content (eg, suicide, anorexia, drugs, etc.), risks associated with user-generated content and online gambling.

- There is also relatively little research on how children (or parents) cope with or respond to online risk, with effort devoted to the incidence more than the consequences, or coping strategies, or long term effects of exposure to risk.
- Some other gaps in research on risk are noted: little in Estonia, the Netherlands, the Czech Republic, Portugal or Slovenia on privacy risks; little also in many of these countries (and also in Bulgaria and Austria) on contact risks.
- It may be that research conducted elsewhere can effectively guide the promotion of safety awareness even in countries where little research exists. But in general, we suggest that reporting findings regarding risk in one's own country is an effective means of raising awareness.

Gaps regarding the role of parents and teachers:

- Research on the role of parents in mediating children's internet use is lacking in a number of countries, and research on the effectiveness of parental mediation is lacking in most.
- Too often, questions are asked regarding parental regulation only of parents, neglecting children's responses to such regulation. Yet when research addresses both parents and children, the discrepancies in their accounts highlights the importance of understanding children's own experiences.
- Where research charts parental and children's attitudes or concerns in general, it rarely explores the effectiveness of particular safety measures (eg, use of filtering software or, even, parental media literacy).
- In the future, research should examine whether and when parents put safety guidance into practice, along with an evaluation of any benefits (or otherwise).
- Similar observations may be made regarding the mediating role of teachers – more research is needed on teachers' skills and literacy, their mediating practices in the classroom, and the effectiveness of their role in improving children's risk awareness and online safety.

4.3 Emerging issues and challenges

Last, we note some of the emerging issues and challenges for this new and often demanding field of research.

Time-sensitivity

- Research in this field becomes quickly out of date, as the technologies, institutions that promote and manage them, and children's own practices all continue to change. Consequently, even where substantial amounts of research exist, the findings must be regularly updated.
- It may be argued that this is a particularly transitional moment, as today's children are growing up with web 2.0 at the same time that much of adult society is still struggling with some basic issues of access and use. We greatly need multi-national research, in which one country may learn from another where appropriate, but in which the specificities of diverse economic, cultural and social contexts are also recognised.

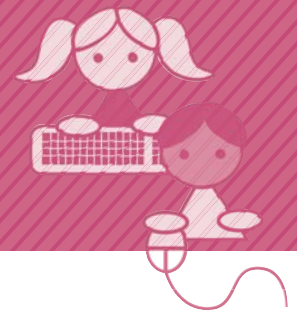
- We found only two, current, longitudinal studies, most research being concerned simply with the short term nature and consequences of internet use. Some studies are repeated a few years apart, providing the possibility of trend analysis. But more tracking studies are required to understand the wider implications of online technologies in the long term.
- The research agenda remains also at some distance from the policy agenda: many studies identify problems and conclude that something must be done, but they often do not focus on, or evaluate the options for, particular policy solutions. While this creates a generalised sense of concern without effectively guiding the policy agenda, we note also that determining exactly what policy windows are open at any point in time is not always made easy for or accessible to the research community.

Theories, methods and standards of research

- Children's internet use, especially regarding online risks, is a complex phenomenon. Regarding research theories and methods, we advocate the importance of multiple theoretical perspectives and multiple methods, so that the various dimensions of children's internet use can be understood in the round – including both the incidence of certain practices in the population, as well as children's own perceptions, those of their parents, and how both these fit within the context of everyday internet use.
- Although multidisciplinary, multimethod, contextual, and longitudinal research is particularly demanding, it remains sorely needed if we are to understand not only what children encounter online but also why, how and with what consequences.
- Research is sometimes poorly reported, with key information missing, or difficult to gain access to. There is scope for improving the quality, rigour and public accessibility of research evidence in this field.
- Interpreting findings in this field commonly draws on comparisons between offline (real-world) and online activities or risks when, say, arguing that the former are migrating to the latter, or that the latter are increasing faster than the former. Yet in the vast majority of cases, research on online activities and risks pays little attention to children's lives offline (eg, their social networks, their parenting, their attitudes to risk-taking or coping with psychological distress). This greatly impedes our ability to draw conclusions from the research that exists, and so represents a methodological, practical and theoretical challenge.

A sensitive and difficult field of research

- The risk agenda remains largely led by adult society, even by media-spread moral panics, and so focuses on pornography, stranger contact, violence, etc. It is insufficiently led by objective evidence of actual harm, whether criminal (eg, incidence of sexual abuse or criminal abduction) or medical (eg, incidence of youth suicide or self harm attempts). It is also insufficiently reflective of children and young people's own agenda of concerns (in which bullying, identity abuse, spam and race hate would figure much higher than pornography or even stranger danger).



- Moreover, it is inherent to childhood and especially adolescence to take risks, push boundaries and evade adult scrutiny, this challenging both the research process and the uses of the research findings.
- It must be recognised that the need for more research on younger children raises some significant challenges regarding research funding, methodology and research ethics (eg, regarding exposure to 'adult' content), as does research on the private nature of much online activity.
- More discrimination is needed regarding the nature of children's online activities and resources to differentiate, notably, different kinds of pornographic or violent content, and to identify the contexts within which harassing or unwelcome contact (eg, within a chatroom, a multiplayer game, a social networking site, by email, etc) is experienced.
- We conclude that research must follow use – tracking online activities for new populations, younger users, new risks, and so forth. Much depends on the researchers' grasp of children's experiences, including their approach to risk, for in many respects, children do not draw the line between risks and opportunities in the same way that adults do.

Annex A: EU Kids Online

European Research on Children's Safe Use of the internet and New Media, see www.eukidsonline.net

EU Kids Online is a thematic network examining European research on cultural, contextual and risk issues in children's safe use of the internet and new media between 2006 and 2009. This network is not funded to conduct new empirical research but rather to identify, compare and draw conclusions from existing and ongoing research across Europe.

It is funded by the European Commission's Safer internet plus Programme (see http://europa.eu.int/information_society/activities/sip/index_en.htm) and coordinated by the Department of Media and Communications at the London School of Economics, guided by an International Advisory Board and liaison with national policy/NGO advisors.

EU Kids Online encompasses research teams in 18 member states, selected to span the diversity of country and of academic discipline or research specialism: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, France, Germany, Greece, Iceland, Norway, Poland, Portugal, Slovenia, Spain, Sweden, The Netherlands and The United Kingdom.

The objectives, to be achieved via seven work packages, are:

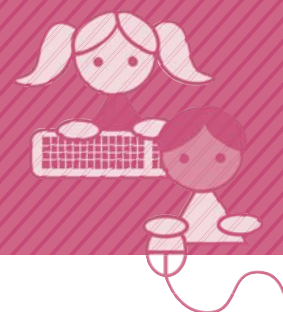
- To identify and evaluate available data on children's and families' use of the internet and new online technologies, noting gaps in the evidence base (WP1)
- To understand the research in context and inform the research agenda (WP2)
- To compare findings across diverse European countries, so as to identify risks and safety concerns, their distribution, significance and consequences (WP3)
- To understand these risks in the context of the changing media environment, cultural contexts of childhood and family, and regulatory/policy contexts (WP2&3)
- To enhance the understanding of methodological issues and challenges involved in studying children, online technologies, and cross-national comparisons (WP4)
- To develop evidence-based policy recommendations for awareness-raising, media literacy and other actions to promote safer use of the internet/online technologies (WP5)
- To network researchers across Europe to share and compare data, findings, theory, disciplines, methodological approaches, etc. (WP1-7).

Main outputs are planned as follows:

- *Data Repository*: a public, searchable resource for empirical research (now online)
- Report on *Data Availability*: a mapping of what is known and not known (Sept 2007)
- Preliminary Report *Comparing Three Countries* (Sept 2007)

- *Methodological Issues Review* (Sept 2007)
- Report on *Cross-National Comparisons* over 18 Countries (Sept 2008)
- *Best Practice Research Guide* (for future research in this field; Sept 2008)
- Report: *Cross-Cultural Contexts of Research* (March 2009)
- *Final Conference* (June 2009)
- Report: *Summary and Recommendations* (June 2009)
- *Final Report and Book* (Sept 2009).

For further information, see www.eukidsonline.net or contact p.tsatsou@lse.ac.uk



Annex B: Network Members

Country	Institution	Researchers	
Austria	University of Salzburg	Ingrid Paus-Hasebrink Christina Ortner	Eva Hammerer Manfred Rathmoser
Belgium	Catholic University of Leuven	Veerle Van Rompaey	Verónica Donoso
	Free University of Brussels	Nico Carpentier Katia Segers	Joke Bauwens
Bulgaria	GERT	Jivka Marinova Mariya Gencheva	Maria Dimitrova Irina Dimitrova
	Internet Rights Bulgaria Foundation	Christina Haralanova	
Czech Republic	Masaryk University, Brno	Jaromir Volek	Vaclav Stetka
	Charles University, Prague	Jan Jirak Radim Wolak	Vlastimil Necas Radka Kohuttova
Denmark	University of Copenhagen	Gitte Stald	
Estonia	University of Tartu	Veronika Kalmus Pille Pruulmann- Vengerfeldt Anda Zule	Andra Siibak Pille Runnel Kadri Ugur
France	France Telecom	Benoit LeLong Cédric Fluckiger	Céline Metton
Germany	Hans Bredow Institute For Media Research	Uwe Hasebrink Claudia Lampert	
Greece	London School of Economics	Liza Tsaliki	John Papadimitriou
Iceland	University of Iceland	Thorbjorn Broddason	Gudberg K. Jonsson
	University of Akureyri Research Institute	Kjartan Olafsson	
Norway	Norwegian University of Science and Technology, Trondheim	Ingunn Hagen	Thomas Wold
	Norwegian Media Authority	Elisabeth Staksrud	
	SINTEF, Oslo	Petter Bae Brandtzæg	
Poland	Warsaw School of Social Psychology	Wiesław Godzic Barbara Giza Lucyna Kirwil	Tomasz Łysakowski Małgorzata Michalak
Portugal	New University of Lisbon	Cristina Ponte Cátia Candeias	José Alberto Simões Nelson Viera
	Lisbon University	Tomás Patrocínio	
Slovenia	University of Ljubljana	Vasja Vehovar Bojana Lobe	Matej Kovacic Alenka Zavbi
Spain	The University of the Basque Country	Carmelo Garitaonandia	Maialen Garmendia
Sweden	University of Gothenburg	Cecilia von Feilitzen	
The Netherlands	The Netherlands Institute of Social Research	Jos de Haan	Marion Duimel
	University of Amsterdam	Patti Valkenburg	
The UK	The London School of Economics and Political Science	Sonia Livingstone Leslie Haddon	Panayiota Tsatsou

Annex C: National Reports

Austria

Overview of national research

The research situation in Austria is characterised by a small number of studies and the available material predominantly consists of representative/quantitative data which concentrate mostly on access and usage, aspects such as frequency, location or purpose of internet use. Qualitative data on how children and adolescents get along in virtual areas and how they are dealing with offers and applications on the internet are rare. Beyond that it can be noted that children under ten years are rather underrepresented in the available findings.

Main features of national regulation

National regulation of the RTR (The Regulatory Authority for Telecommunications and Broadcasting) in Austria is said to be a bit lax. By contrast, there are four instruments of self-regulation of the Internet Service Providers Austria (ISPA) that count more than 200 members. These are a code of conduct for providers, a hotline for reporting illegal content online, a domain-administration (nic.at) and a code of conduct for accountability and obligation to give information for internet providers.

National research status

14 national studies concerning the topic 'children and internet' were found in Austria. They can be roughly divided into following groups:

- a) Market-focused commercial studies (as observation instruments). These studies and findings can be considered to be market research and they often serve according to their own self-definition as 'continuous observation instruments of the internet market'. Research within this group concentrates on access to the Internet, the frequency and purpose of usage and is focused on the population in general.
- b) Non-commercial contract research/Multi-topic studies. Research within this group predominantly consists of multi-topic studies. The main topics are access to and usage of the internet, gender-specific differences with usage, popular uses and applications, occasionally attitudes towards the internet and online competencies and skills. The studies are usually carried out by market research institutions or other research establishments and concentrate mostly on adolescents. In contrast to the market focused commercial studies the clients in this group are non-profit or social-profit organisations.
- c) Quantitative studies in the context of university research. Research within this group is carried out in the context of university research, either in research projects or in master theses. The topics of the studies are access to and usage of the internet by children and young people, motives for being online, favourite applications and attitudes towards the internet (also in the context of gender-specific differences). Adolescents are slightly overrepresented compared to children.
- d) Qualitative studies (partially multi-method design). These studies are all conducted in the context of master theses research or by non-profit organisations with the help of qualitative research methods. Research concentrates on how children get along in virtual areas, how they deal with online-offers and applications, how online

competencies and skills are acquired, what experiences, desires and expectations they have and what attitudes towards the internet they have. Children are taken more into consideration than in the other groups of studies.

Common topics were online-access, usage, the online offers that were used, contents and activities, opinions and attitudes towards the internet and online-competencies and skills.

The studies and/or reports are mostly online available. Some studies do not offer any report but provide summaries instead and publicly accessible information and results exist. Some research was conducted in the context of master theses.

The research situation is all in all insufficient on several levels. On the one hand there is a deficiency of research topics. While online access, usage, frequently used offers, applications, contents and activities are quite well researched, data concerning attitudes towards the Internet, attitudes towards online risks and problematic contents or online competencies and skills of parents are rare. A further deficiency is the small number of studies and findings as a whole. On the level of research methods an imbalance between quantitative and qualitative methods can be noted. Quantitative, often representative studies that concentrate on access and usage data are in majority. There are hardly any qualitative inquiries that concern for example how children deal with online offers and applications. Studies that combine quantitative and qualitative research methods do not exist at all. A last deficiency can be identified with the examined age groups within the studies. Children under 10 years are rather underrepresented in the available research.

Belgium

Overview of national research

In Belgium research has focused mostly on how young people are making use of the internet and how differences among young people's internet access and use correlate with their social background. Concerning the risks related to the Internet, particular interest has been shown in the digital divide among young people, in the commercial exploitation and computer (security) awareness of young people and in cyberbullying among peers.

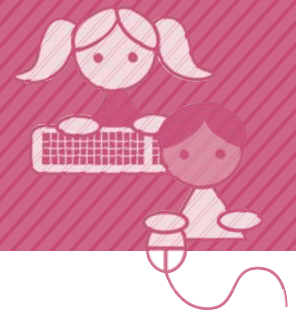
Main features of national regulation

This is currently being studied by a research group of jurists, the so-called TIRO-project (Teens, ICT, Risks and Opportunities).

National research status

The majority of the Belgian research on young people and the internet is regional, that is Flemish or Walloon. Only rarely is the research realised on a national (ie, Belgian) level. Empirical academic research on the online practices of young people is mostly found in the Dutch speaking community of Belgium. The research tradition in the French speaking community of Belgium is more theory oriented.

In general, research on young people and the internet is split into a more academic approach, funded by the universities and research foundations, and a more applied approach, funded by public organisations and



institutions. Public institutions play an important part in studying and promoting children's integrity and well-being on the internet.

Most of the research that has been conducted, both small- and large-scale studies, focuses on teenagers and adolescents in secondary education. The online practices of children in primary education are less frequently investigated.

Researchers from different social science backgrounds are studying the online practices of young people. Media and communication scholars are clearly leading the field of research and show a special interest in the access, uses, appropriation and skills in relation to online media. Sociologists, psychologists and pedagogues, sometimes involved in interdisciplinary research projects, are studying young people's engagement with the internet in relation to social inequality and the educational system.

Paper and pencil survey research, conducted in schools and based on self-reports by the children, are slightly overrepresented. A combined research approach, mixing a large-scale survey with in-depth interviews, is also well represented. Most of the studies invest much effort in describing how many young people are connected to the internet, how they got connected to the internet, how they are using the internet, how often and how heavily they are making use of the internet, which particular activities they are involved in and which interests they show when they go online and how differences among young people might correlate with their sociodemographic background (eg, gender and education).

There is less research using a qualitative, ethnographic, interpretative and constructionist approach to young people's online practices, aimed at understanding what the internet means for them and how it is embedded in their everyday life world.

It is only in the last few years that an interest in the risks and dangers of the internet has grown. Still, the spectrum of risks that has been studied so far remains rather narrow. Particular interest has been shown in the invasion of young people's privacy by commercial firms (spam), in the commercial exploitation of children going online, in the exposure of children to harmful content, in computer security awareness, in cyberbullying, cyberharassment and cyberstalking among peers and in the broader social risks (eg, the digital divide).

In Belgium, there is no real tradition of effects research that studies and measures the impact of the internet on young people's behaviour and attitudes. Research into more content-related issues relating to the internet, online games, identity experiments, learning opportunities or/and risks also remains underdeveloped.

Bulgaria

Overview of national research

Internet safety for children is a new topic on the agenda of Bulgarian society, which has been tackled with more in depth studies only during the last year. The most complete study was conducted in April 2006 in the project 'The Child in the Net', whose aim was to study the risks for children when they communicate via the internet. It resulted in a major awareness-raising media campaign.

Main features of national regulation

There is no specific national law dealing with harmful content and related internet issues. The only relevant piece of legislation is The Law on Electronic Document and Electronic signature from 2001. However in the Penal Code there is a chapter on child pornography and child pornography in the internet. The punishment for this crime has been increased recently.

The national legislation, according to the National Council for Safer Internet, is at the level of the legislation in other EU countries

National research status

The amount and level of research into the use of the internet and other online communications by children in Bulgaria is insufficient. Internet safety is a new topic that has been tackled in more in-depth studies only during the course of the last year. Some partial data could be found within broader studies of the use of communication channels by the population and national statistical institute publications.

The most recent and complete study is of the National Center for Studies of Public Opinion conducted in April 2006 within the project 'The Child in the Net', whose aim was to study the risks for children when they are communicating via the internet. The study was funded by the British Embassy. The topics researched were the frequency of use of the internet, the reasons for using the internet, accessibility (home, school etc.) of the internet, chatroomst and chat partners, the follow-up actions resulting from shared Internet/chat experience, and the dangers and threats during online communication. The quantitative study consisted of 800 students from 5th to 11th grade in five Bulgarian towns. There was also an online inquiry with 1688 respondents (590 at the age 12-17).

The previous study from the same agency was conducted in 2003. The subjects were students 12 – 18 years, parents of the same students, teachers of the same students. The survey was conducted in 21 secondary schools in five cities in Bulgaria, including the capital. The questionnaires were filled in by 770 students, 611 parents and 295 teachers. The study was representative at the national level for the schools with regular internet subscription.

The third piece of research studied the gender differences in attitudes to and use of the internet and the ICTs. It was conducted in 2002 by GERT and covered 200 children, aged 15-18 years old.

Czech Republic

Overview of national research

The empirical research on children's use of internet and new media in the Czech Republic is still relatively underdeveloped, both in the academia as well as among other institutions and research bodies. Six national studies could have been included in the repository; five of them quantitative, focusing mainly on a description of internet access and online activities, and one qualitative. Only two studies dealt specifically with the issue of risks connected with children's use of the internet.

Main features of national regulation

The area of the internet in the Czech Republic is, in regards to the issues of harmful content and children protection, regulated by the general Criminal Code, which, in several articles, specifies what kind of behaviour is illegal (racial/ethnic/religious group defamation, the subornation of minors to sexual commerce, distribution of materials endangering public morals etc.).

National research status

The empirical research in the field of children's use of the internet and new media in the Czech Republic is, unfortunately, rather scarce. Until the end of 2006, only a handful of national studies (6) which fulfilled criteria for standard scientific research were conducted, which results in a considerable shortage of information about the way children and teenagers in the Czech Republic access and use online media and technologies, as well as about the risks they are encountering in cyberspace.

The available research consists of six studies, four of them stemming from academia, one conducted by a private research agency and one by a non-governmental organisation. Of these four studies, three are part of an international longitudinal research project called the World Internet Project (www.digitalcenter.org) which, through the above mentioned department, the Czech Republic has been part of since 2003. Within the framework of this project, national quantitative surveys incorporating common questionnaire items are carried out annually. Funding for the Czech part of the project is provided by the Ministry of Education. Of the two remaining studies, one was organized by the Czech Safer Internet Combined Node (CZESICON), a Czech national member of the EU Safer Internet project, and funded by the EU and the Czech Ministry of Education. Conducted by a Polish research agency Gemius, which carried out the same study in Poland, it enables an easy comparison of data from both countries. The remaining study which is included in the repository was designed for purely marketing purposes and was conducted by the marketing agency Median.

Only two studies were focused specifically on children (12-17 year olds in case of the study conducted by Gemius and 7-14 year olds in case of Median), while the other four were of a more or less broader scope, where the sample could have involved either the entire population (aged 12+) or respondents whose age could have exceeded 18 by several years. Five of the studies are a quantitative, only one is of a qualitative nature. The five quantitative studies, four of which can be described as representative of the Czech population, are mostly descriptive in character, focusing primarily on issues related to internet usage, online access, competences and types of online activities, and finally psycho-social characteristics of the users. The risks associated with access to the online technologies were only examined in two of the total six studies (33 per cent). The only study which used qualitative methods (namely non-structured interviews) was concerned with issues of identity play on the internet among teenagers and adolescents.

Obviously, the main insufficiency as regards Czech research on children and new media is the overall low number of empirical studies conducted in this field. In sum, the focus has until now been on quantitative studies, which are of a broad scope (mostly nationwide) but rather homogeneous in terms of research topics and rather shallow concerning the number of

social and psychological factors which could possibly affect the relationship between children and the online world. Therefore, along with continuing (and, hopefully, expanding) quantitative research, a more subtle, qualitative (possibly ethnographic) approach is needed. It is also important that future research focuses more on risk issues, particularly on violent, sexual or racist material on the internet, or on cyberbullying, harassment or cyberstalking, which have so far been completely neglected.

Denmark

Overview of national research

Research in Denmark on children, young people and online media has generally focused on access, uses, meaning and social changes, and to some degree on learning. The overview, however, is incomplete – more studies in various research areas remain to be registered and described.

Main features of national regulation

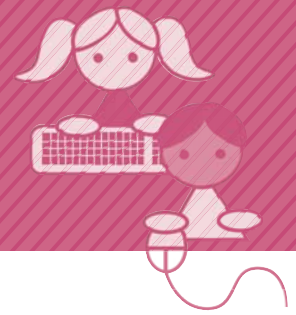
EU legislation is followed but the ministries which are responsible for one or more areas in this respect (the Ministry of Culture, Ministry of Education, Ministry of Science and Technology) have various focus areas and are aware of some of the problems that need to be studied further and areas where more/other legislation or other initiatives may be needed.

National research status

First of all, the reported 16 national projects in the repository do not represent the total picture – more projects need to be identified and reported, partly from individual projects across Denmark, partly projects conducted by NGOs and other organisations, or by working groups within Ministries. This national report gives a superficial picture of the most accessible projects within the past 6-8 years, but more are out there.

The projects reported at this point indicate that the research takes place primarily within media studies and then learning/pedagogical studies. This demonstrates which disciplines and research areas have focused on media development, uses and effects. In comparison to many other countries media have primarily been studied within the humanities and pedagogy – and during the past few years within IT-studies of various kinds. In other words, media studies are not very prominent within sociology. This picture may be changing somewhat as the notion of the broad integration and impact of (digital) media becomes stronger in research areas that so far have not focused on media. The tendency is that we see more cross-disciplinary studies – either in terms of cooperation between institutions/areas or by drawing on various approaches and methods within an individual research institution/project.

During the past few years the basic principles behind the public research funding of research projects in Denmark has changed from being mainly fully funded by public means with only a very small amount of private funding. Now it has become the norm that research programs and projects are only partly funded by public means, and that the rest must be found internally at the research institutions or by external cooperation eg, with other organisations and institutions or with business companies. In a few years time the list of funding sources may be more mixed and combined with external, commercial funding.



It seems that the research interests – at least in these reported projects – regard children and adolescents in a broad group or as primarily teens. This seems to mirror the public and political focus on teens and their everyday life, their problems and potential. Studies of digital media in Denmark have focused very little on the youngest children (below the age of 6) and less on children (6-12) than on teens – unless we talk about comprehensive studies of children between 6-18.

Specific foci on risk factors are more prominent in the multi-country projects (SAFT, Eurobarometer) than in the Danish projects. This may indicate that there is a stronger interest in this area internationally than in Denmark and that the EC promotes projects with this focus. But, it cannot be concluded that there is no interest in studying risk factors in Denmark. Some of the as yet unreported NGOs and other institutions do in fact have a stronger focus on risk areas. So do some of the initiatives from the relevant ministries and the Danish Media Council. But, in academic research, risk is primarily studied not as isolated phenomena but in a broader context such as access, uses, learning, skills for using online media, effects regarding social relations, gender issues, creative experience, etc.

Estonia

Overview of national research

It is remarkable that there are rather many studies related to internet use in Estonia; however it is regrettable that none of the currently available researches focus specifically on children's safety online.

Main features of national regulation

There exists no national regulation related to the protection of children online in Estonia.

National research status

By end of year 2006 we managed to find a number of studies concerning the use of the computer and the internet in Estonia. The fieldwork for these studies was conducted between 2000-2006. None of the studies had a publicly available dataset. Eight studies had a report online, two studies did not. Most of reports were available only in the Estonian language; however, a number of scientific articles and one doctoral dissertation were published in English.

By February 15, 2007 we had coded 10 national studies. In five of the studies the use of computer and/or the internet is one of several topics examined. The other five concentrate specifically on this topic, each from a slightly different perspective. Five of the studies were funded by research foundations, two by national government and in case of three studies it was impossible to identify the source of the funding. Four of the studies focused specifically on children, one study focused on children as well on youngsters in the age range from 18-26. There were three studies where the target group was school children and teachers. In the case of the two remaining studies the target group was general population – children were just one part of population examined. Three of the studies are classified as qualitative, five as quantitative and the two remaining ones have features from both qualitative and quantitative research. In the case of two studies

the size of sample was not indicated. The studies 'Me. The World. The Media' and 'Tiger Under Magnifier' were carried out twice. The first time the number of children examined was 135 and 2,731, respectively; the second time 151 and 2,088, respectively. In the other studies the size of the sample (number of children examined) was as follows: 1,131, 204, 36, 1,864, 600, 5842. The age of children was not specified in two studies and in four studies instead specifying age they had specified the grade that the children were studying in at school; this information, however, allows us to guess the approximate age of the children examined. When summarising all the coded studies the age of children examined is: 8-19 (in addition, the TNS Emor E-track survey includes children of 6 to 7). So the studies cover all ages of children that are studying at school.

The studies concentrated mostly on topics related to computer and/or internet use and access, learning by using computer and/or the internet, skills in using computer and/or the internet, the role of the internet in searching for information and communication with other people. The study 'Children of Screen and Monitor' focused in addition on the topic of advertising on the internet and downloading. Except for Mediapro, none of the studies focused on the risks of internet use or examined the topics of regulation of online technologies or topics related to parents. These are the areas in online-related research in Estonia that should be addressed more thoroughly in the future.

France

Overview of national research

In France, there have been very few empirical studies specifically focused on children's online practices. A small but growing body of research is produced by various public and private entities. Most of the approaches come either from the sociology of ICT uses or education science. Children's safety and parental control have so far received very little attention.

Main features of national regulation

In contrast to some other countries, no one institution is widely recognized as the unique actor dedicated to the protection of children's access to media content. The two main institutions are the CSA (Committee for the Surveillance of the Audiovisual sector), particularly active on the labelling of broadcast audiovisual material (especially movies) and the ARCEP (telecom regulation agency). Child protection online is a part of its responsibilities, but its actions mostly focus on market regulation (such as pricing or economic competition). However, family associations and consumers associations are particularly active on matters of parental control (such as the usability and efficiency of internet filters).

National research status

Research funding is rather heterogeneous, coming from State agencies (eg, ANR, Ministry of Culture, Ministry of Education) on the one hand, and commercial companies from the telecom and media sector on the other. Actors producing empirical studies are diverse too: in addition to academia, research is also undertaken by survey institutes, audience measurement consultants (Médiamétrie) and social research units within private companies.

A wide range of methods are used: eg, in-depth interviews, ethnographic observations, questionnaires, server-centric or user-centric digital data analysis.

Basically, children's online access and uses are mainly investigated by two academic disciplines: sociology and education. There are very few empirical contributions from other fields, like psychology or languages.

In the sociological field, many studies come from the sociology of media and the sociology of the family. They use mainly qualitative approaches, based on in-depth interviews, sometimes combined with ethnographic observations (and more rarely complemented by quantitative analysis). These studies focus on the role of ICTs in the young people's development of their independence ('autonomisation'), especially in relation to peer relationships and identity construction.

In educational research, most studies focus on ICTs' integration in the school system, and the consequences for its organisation, finance and teacher training. Only a few studies deal with pupils' uses. These studies are mainly interested in pupils' skills, with a range of methodologies ranging from observations to paper and pencil surveys.

Some studies have investigated the link between the child's level of social, economic and cultural resources and the forms of risk awareness and parental control.

Most studies emerging from academic research are published as books or journal articles, mainly in French.

The sociology of youth, although a rather active field in France, does not show a particular interest in children's use of ICTs. Until recently, sociological research on youngsters concentrated on teens (as opposed to pre-13 year old children).

The four national studies in the repository give a preliminary overview, concentrating on the diffusion of ICTs and the sociological analyses of usage. Other studies have to be added, and the disciplinary scope extended to educational science.

Germany

Overview of national research

The German research of children and online media is based on several studies (most are quantitative, commercial studies), which focus on access, usage and online activities. There is marginal empirical information about online risks and/or the contact with problematic contents.

Main features of national regulation

In 2003, the *Interstate Treaty on the Protection of Minors in the Media* was reformed to simplify the regulation system to strengthen the *regulated self regulation*. The main modification has been the Constitution of the *Commission for the Protection of Minors in electronic Media* (KJM, *Kommission für Jugendmedienschutz*).

National research status

The German research report is based on 24 national studies entered

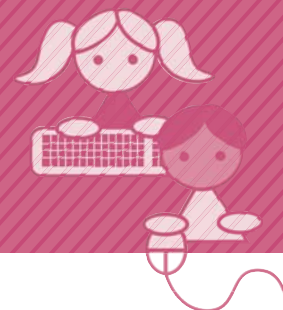
into the EU Kids Online data repository. Most of these studies are commercial studies that are based on quantitative methods. They are often funded by (online) companies, commercial broadcasters, publishers or by public-private partnerships etc.

There are only a few independent, academic studies, which are financed by, for example, federal funds, media authorities or public broadcasters. Most of these studies provide quantitative empirical data, only a couple of studies use qualitative methods. The focus is either on children between 6 and 13 years old or on adolescents from 14 to 19 years old (some consider the whole population from 14 years up to 49 years and/or older), while studies with preschool-children (under 6 years) are an exception (*ibid.*). The majority of studies focus on access, use and online activities, whereas online risks are noticeable less investigated.

Due to the fact that the studies are based on different methods, instruments, samples and concepts the data of the present studies are difficult to compare and in some cases unsurprisingly contradictory. Another crucial fact is that the internet is generally treated as one homogenous medium without considering that it encompasses several different services like the world wide web, email, chat, instant messenger etc.

Regarding the German research we can identify some open questions and/or gaps concerning children and online media:

- How do children under five years use online media?
There is only a little information about the role of online media in the life of preschool children. There are already many special websites for this target group, but we know almost nothing about these children's online activities.
- What influence has the internet on media socialisation?
Up to now there has been no study which has investigated the impact of new media technologies on the socialisation process in general and on media socialisation in particular. Therefore, longitudinal studies are needed.
- How do children adopt the Internet?
Most studies focus on access, use and activities without asking what children really do when they are online. The few qualitative studies state that the perception and therefore the adoption of online media are completely different from adults. Therefore qualitative research is particularly needed.
- What do children define as 'online risks'? And how do children handle them?
Some studies claim that children have a completely different definition and understanding of risks, but there is no study which deals with the definition and perception of risks from a child's perspective. Therefore, qualitative research in combination with observation methods is needed.
- How do parents and other adults deal with the online use of their children?
The current studies that investigate the perspective of parents indicate a gap between the older and the younger generation. Most of the parents do not know what their children do with the computer and/or the internet, what websites they use and if they have already had negative experiences and how they dealt with them.



Greece

Overview of national research

The study of the relationship between children and/or young people and online technologies in Greece is still seriously underdeveloped, considering that in January 2007 only a handful of research papers and surveys since 2000 were identified. The 28 national studies cover a variety of thematic axes, not all of which pertain directly to safety threats and risks for children and adolescents.

Main features of national regulation

Apart from the general provisions of Law 2472/1977, which protects personal data, the Greek Constitution and the Greek Penal Code safeguarding one's person from insults, protecting the privacy of communications, as well as protecting transactions of any kind (including digital ones), specialized provisions are now in place in order to regulate electronic communication.

These are:

Law 3471/2006, which implements the 2002/58 EU guideline and refers to the protection of personal data and of one's privacy when it comes to electronic communication.

Article 348 of the Penal Code, which forbids facilitation of the debauchery of others as well as the facilitation of lecherous behaviour by any means, be it via a classified advertisement, a telephone conversation, an electronic message, or an image. Perpetrators face fines and imprisonment.

Article 348a of the Penal Code, which is about the protection of minors by forbidding child pornography of any kind – pornographic being any material, visual or not, which intends to stimulate sexual drive.

Articles 370 and 370b and 370c of the Penal Code, offering protection from hackers, whereby state, scientific and business secrets are protected.

Police Units persecuting Electronic Crime were established in 2004 by Presidential Decree (P.D. 100/2004). The statistics offered report that from 2001 to 2006, 50 cases of child pornography were uncovered in Greece, 119 people were charged and 93 were arrested.

The body responsible for the Protection of Privacy in Communications (ΑΔΑΕ) activated the P.D. 47/2005, which regulates communication privacy and the conditions under which this is rebuked.

The Units persecuting Electronic Crime of the Greek Police are in active collaboration with Interpol, Europol, Public Prosecutors, and various hotlines in a mutual effort to combat electronic crime.

National research status

The study of the relationship between children and/or young people and online technologies in Greece is still seriously underdeveloped, considering that in January 2007 only a handful of research papers and surveys dating back to 2000 were identified. The 29 national studies found so far cover a variety of thematic axes, not all of which pertain directly to safety, threats and risks for children and adolescents.

The majority of studies available are single-country; only one of them is in fact part of a wider European project where other countries are scrutinized, though the article itself reports on the Greek part of the initial project. Only five studies (representing academic papers) are written in English with the rest of the work is available in Greek only.

Eight studies out of 28 focus on children as a target group, making the national population the most frequent group studied. Most studies on offer so far involve older children, ie, from the age of 11-12 or 15-19.

In terms of the quantitative-qualitative balance, 14 studies are quantitative, one is qualitative study and two works are theoretical. There also exist studies (conference papers, presentations, a doctorate thesis) which are not publicly accessible; therefore, their exact methodology, funding bodies and research focus cannot be determined. Most of the quantitative ones are using structured questionnaires along with interviews (either over the phone or face-to-face). In addition, there are ten larger scale studies (ie, national surveys), most of which are using representative samples of the general population, and four sub-national studies, using non-representative samples.

The national surveys are co-funded by the European Union and the Greek Government. The majority of them are the responsibility of (a) the Observatory for the Greek Information Society (www.observatory.gr) and (b) the National Statistical Service of Greece (www.statistics.gr). The academic papers (10) do not mention funding explicitly, apart from one which is, in fact, part of a wider multi-country EU project. The research for these papers may have been conducted with departmental money along with the recruitment of student assistance. The Ministry of Education and the Greek Police have also acted as funding bodies.

Insofar as the disciplines involved are concerned, this can only be applied to the academic studies since the other surveys represent Government bodies. These academic studies come from departments such as early childhood education, computer engineering and informatics, applied informatics (though the researcher in charge is a professor of sociology), the institute of computer technology, psychology and communication studies. Since the majority of studies found come from an educational/pedagogic or informatics background and very few tackle the social impact of online technologies, it appears that the field of internet safety from a sociological point of view is still in its infancy in Greece.

Therefore, although a body of relevant research is gradually being compiled, the bottom line remains that the issue of internet and online technology safety in Greece is only recently attracting consistent research attention.

Iceland

Overview of national research

Research on children and online safety has been carried out to a very limited extent in Iceland. A very notable exception from this is the fact that Iceland has participated in surveys carried out in connection with the Safer Internet Action Plan. Other than this, information on children's use of the internet and possible online risks is to be found in surveys with a more general media use perspective or as a by-product of surveys aimed at other issues but where online use has been measured. Research based on qualitative methods is virtually non-existent in Iceland.

Main features of national regulation

The national legislation is similar to those of the Scandinavian countries.

National research status

Information on children and issues of online use and online safety in Iceland can basically be obtained from three research projects. All of these are quantitative and based on representative samples for the respective age groups.

The first of these and the most comprehensive one is research carried out in connection with the Safer Internet Action Plan or SAFT project. Over the last few years SAFT Iceland has collected data on children and adolescents and their use of mobile phones, net-ethics, net-education, media literacy, and online and console gaming. Currently SAFT is conducting, in collaboration with Capacent/Gallup, a national survey of parents and school children on the same topics. The Ministry of Education, Capacent/Gallup, Iceland Telecom, Vodafone, Microsoft Iceland, Post and Telecommunications are among those who have been involved with the SAFT surveys.

The second study is Children and Television in Iceland. This is a long-term research project which dates back to 1968 and has been repeated with six years' intervals since 1979 in three communities in Iceland. Since 1997 these surveys have included several questions on the internet and the children's use of computers. The strength of this particular project is that it enables a time-series comparison as well as rather extensive possibilities for comparison with the use of other media. The main limitation of this project is that it has a general focus on media use rather than on online use in particular.

The third one is a group of surveys carried out in Iceland as a part of trans-national research projects focused on children's health and well-being in general. An example of this is the 2006 HBSC survey in Iceland carried out as a part of WHO's Health Behaviour in School aged Children. This survey contained questions on the use of computers and game consoles as well as internet usage. The strength of these surveys is that they enable cross-country comparisons and in the case of Iceland they are not limited to a sample but cover the whole population of school children. This enables very powerful data analysis. The main limitation of these surveys is, however, that they contain very limited information about children's online behaviour.

Research on children and online media has mainly been studied within the field of sociology. This can partly be linked to the fact that media and communications studies are taught within the department of sociology at the University of Iceland.

As mentioned before, research on children and online media in Iceland has had a very general focus with research questions around time use and access. The exceptions are the SAFT studies which have in addition to access and time use, focused on net-ethics, net-education, media literacy and online and console gaming.

A main gap in the research on children and online media in Iceland is simply the lack of such research in general, with notable exceptions such as the SAFT project. Currently SAFT is preparing a survey on children's online use and gaming and safety issues, particularly in relation to user patterns and online identity, in collaboration with the Ministry

of Finance, Microsoft Iceland, Morgunbladid and Capacent/Gallup. However, no research institute within the social sciences has been focusing on children and online media and as the research community in Iceland is only as big as you would expect in a nation of little more than 300 thousand inhabitants no media researcher has made children's online use her primary research focus.

Norway

Overview of national research

Despite the high diffusion of new media available in Norwegian homes, there is strikingly little research on children's use of new media in Norway. The research focus has mainly been on children from 9 years to 16 years asking how they use new media and possible risks. There exist few studies with an high quality academic approach, the majority of the studies have just been mapping risks and media use behaviour among children, rather than dealing with why and how certain risks develop.

Main features of national regulation

The focus on national regulation have been on providing children not with filter technologies but rather providing children and their parents with digital competence so they can be able to regulate themselves. Digital competence is now also part of the new school reform 'Kunnskapsløftet' in Norway.

National research status

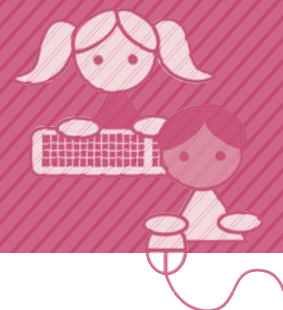
There is in general strikingly little research on this topic in Norway.

The qualitative research has mainly been in-depth interviews with children from the age of 10 year to 16 years old. The focus have been on how children communicate and experience communications in new media such as chatrooms and using mobile phones or how they use the internet in terms of exposure to illegal and harmful content, contact with strangers and cyberbullying.

The quantitative research has mostly been studies mapping media use patterns, what type of media are accessed and used, and how this differs by age groups and gender. A well known study, SAFT – Safety, Awareness, Facts and Tools – is a cross-European project that aims to promote safe use of the internet among children and young people. SAFT wants to teach children and teenagers how to reduce 'risk' behaviour and be responsible internet users. SAFT also work to empower parents, educators and the internet Industry to help the children reach this goal.

The SAFT project in Norway has completed two national representative surveys on (2003-2006) children's (9-16 years) use of the internet, mobile phones and computer games, safe use and risk behaviour, and attitudes and knowledge regarding digital competence. SAFT have also conducted two surveys (2003-2006) mapping parental knowledge of children's use of the internet, mobile phones and computer games, mapping out user patterns and risk behaviour in all risk-related fields and parental attitudes, mediation, fears and strategies.

A second study is the project 'A Digital Childhood' (2002-2004) that included a survey conducted among children from 7-12 years of age in



Oslo. This project has generated knowledge of the uses and experiences of a variety of new media technologies among children at both individual and group levels. The main focus was not on risks, but rather on how different types of media use link to children's psychosocial factors.

A third study, 'Citizen Media', looks at the distribution of patterns of media use in different countries by analysing statistical data from Eurostat about present ICT usage in households and by individuals. The focus is not just on children, but on the whole population. The focus is not on risk behaviour online, but on patterns of media use and how different user trends develop in a cross-cultural perspective.

A fourth study has been focusing on the ease of access to sexual, violent and hateful commercial content on the world wide web via common search engines and authenticity of and rationale behind content.

In general there exist few academic research projects on the topic of risk, children and media, and there have only been a few publications in journals reflecting the national research on children's use of media in Norway. Most studies are documented online, as short summaries or reports. Some are only available in Norwegian.

The studies so far have been on mapping and quantifying children's risks online, rather than investigating how and why young people exhibit risk behaviour in online environment. There is, in addition, a lack of research regarding children's risks in online multiplayer games and in social user generated applications.

Poland

Overview of national research

There is a great need for education in the field of using the internet, which would include children, parents and teachers in Poland.

Main features of national regulation

There is a currently regulation in the Polish parliament, which is waiting to be discussed and voted upon. It will regulate the field of using the internet, including questions of safety.

National research status

Two types of national research exist: studies of children aged 11-18 years old and a study of the population in general. All of them are single-country studies, funded by the Government or NGO/Non-Profit organisations. Only one study was based on a representative sample – the others are rather qualitative. The size of the sample was between 500 and 10,000 children. The average age of the children studied was 13-15.

The main research topics were internet security and paedophilia on the Web. Reports of the studies are available offline, in paper publications although summaries (mostly in Polish) can be found online.

The first study was 'Research on the risky behaviour of Polish children on the internet', and was conducted through web intercept surveys placed on web sites using the free site-centric audit provided by stat.pl / PBI. The analysis covered two target groups: internet users aged

12-17 and people aged 18+. Furthermore, amongst respondents aged 18+ the parents of children aged 12-17 were identified. Surveys were filled in at random between the 11-12 January 2006. The survey covered 1,779 internet users aged 12-17, 3,768 respondents aged 18+ and 204 parents of children aged 12-17, all of whom filled out the survey in its entirety.

The second study was 'Paedophilia and Pornography on the Internet: Threats to Children. POLAND 2003', and was conducted with 8,991 regular users of the internet aged 12-17. The survey was conducted by Łukasz Wojtasik working on the Nobody's Children Foundation's research programme. The sample consisted of 8,991 children – 1,180 boys (13 per cent) and 7,763 girls (87 per cent) – aged 12-17. The questionnaire was available for five months, from 10 December 2002 to 10 April 2003, at selected websites for children and adolescents. The research was financed by UNICEF and supported by the following websites: BRAVO www.bravo.pl, Centrum Edukacji Obywatelskiej www.ceo.org.pl, DZIECI BEST www.dzieci.best.pl, INTERIA www.interia.pl – one of main Polish webportals. The respondents were asked which internet services they typically used. The children were also asked if they had heard about threats associated with ignoring rules.

Portugal

Overview of national research

In the studies focusing on Portuguese young people a significant amount of the fieldwork dates deals with school-years, as the researchers opted to conduct the studies at schools. They are mostly non-funded PhD/MPhil research and mostly not available online. The theoretical framework came mostly from education. Other disciplines include sociology, the sociology of youth, the sociology of childhood, and marketing. Most of the research focuses on the use of new technologies, particularly the internet, in educational contexts. Some attention has also been devoted to online interaction and social networking. There is an absence of risk related research.

Main features of national regulation

Portuguese legislation on new Technologies has existed since 1985 regulating issues of safety, copyright, e-commerce, etc. covering the protection of citizens (children, young people and adults) and may not differ from other EU countries as it is based on European policies. In 2005, the Government launched a Technological Plan, with 112 measures oriented to reducing the Portuguese technological gap in the European context. However, within these measures, regulatory procedures aimed at increasing safety on the internet have not been considered.

The main regulatory agency is ICP – ANACOM (National Authority for Communications) which disseminates and monitors the norms regulating safety and e-commerce, telecommunications operators, and all issues concerning telecommunication networks. Nonetheless, the monitoring seems to have little public and media visibility and it might be argued that the actions taken have little relevancy and efficiency.

Provedor de Justiça (the Ombudsman), the *Provedoria de Justiça de Portugal*, is concerned with the mobile phone's use and has

worked closely with several ministerial offices, ICP-ANACOM, and telecommunication operators in October 2005 when promoting a campaign for children's safe use of the mobile phone, oriented also to promoting awareness on internet benefits and risks¹. To date the legislation includes some of the previous points but there are no concrete measures following the Provedor's intervention.

National research status

The research currently found focuses on the country's population of children and young people and is based predominantly on non-representative and sub-national samples. In terms of research methodologies, the tendency is to combine qualitative and quantitative techniques, particularly observation and surveys (questionnaires). We found that participant observation is not always well documented, and seldom did we find the researcher being reflexive about his/her role as an adult wanting to participate in children's activities. The theoretical framework came mostly from education. Other studies can be placed within the fields of sociology, the sociology of youth, the sociology of childhood, and marketing/economics. There is an absence of contributions from Media Studies and Social Psychology, which has an obvious impact on the choice of methodologies (for the moment, for instance, no discourse oriented methodologies have been identified). Also, there is a gap in the research as regards us on the internet in informal spaces since research conducted at schools prevails.

Some research has been sponsored by national research foundations such as FCT (Fundação para a Ciência e a Tecnologia) but it is mostly the outcome of non-funded PhD/MPhil research, which might explain the pattern of research strategies identified. It is important to underline that, at the moment, we found no commissioned research on safety and risk online.

There is a predominance of research focusing on the use of new technologies, particularly the internet, in educational contexts. Some attention has also been devoted to online interaction and social networking but, again, the school emerges as a privileged space for observation and analysis of such practices. Broadly, the studies looked at the following issues: the www's integration in kindergarten activities; uses of the internet and computer games at school; children's online interaction and social networking; children's online skills and internet usage; the internet as a tool to overcome exclusion in peripheral regions; youth cultures (the use of the internet as a space for cultural production and political participation); children as consumers, and the internet as a communication channel to sell products and services.

Portuguese research is characterised by an absence of risk-related subjects, possibly due to the difficulty of researching the topic (studies investigating risk behaviour may involve long-term participant observation, difficult to achieve in the context of a PhD or MPhil thesis). Children's and young people's attitudes and behaviour towards safety and risk (considering exposure to harmful contents, sexual identities, harassment and bullying, vulnerability to paedophiles, gambling, illegal downloading, etc.) have not been a priority, and there is also

little information about gender and age differences. Parents and their mediations are almost absent from the existing studies. Some research has been found in the field of criminal studies, however, access was limited. Such data profile possibly indicates that academic research follows the country's positive social perceptions of the internet.

Slovenia

Overview of national research

Of the six national studies outlined below, four were conducted within the Centre for Methodology and Informatics, Ljubljana University and all were quantitative studies.

Main features of national regulation

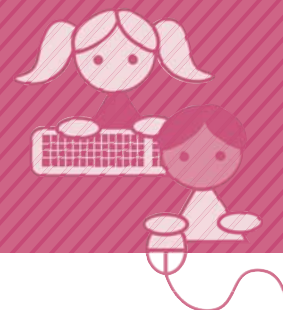
In Slovenia, researchers have to follow the Rules on the Collection and Protection of Personal Data in Elementary Education (http://zakonodaja.gov.si/rpsi/r06/predpis_PRAV6096.html) and the Personal Data Protection Act (http://zakonodaja.gov.si/rpsi/r06/Predpis_ZAKO3906.html), which means that one needs to acquire the consent of the parents when researching primary school children. For secondary school children (up to 18), consent is needed if the research takes place during school time.

National research status

The Slovenia national studies are as follows:

- a) *The usage of Information Communication Technologies*. The fieldwork was conducted by the Statistical Office of the Republic in Slovenia and Centre for Methodology and Informatics (project RIS – Research on the Internet in Slovenia, Faculty of Social Sciences Ljubljana) in spring 2004 and April 2005. The aim of the study was to gather data on the basis of a standardized EUROSTAT questionnaire for the Statistical Office of the Republic in Slovenia. In April 2005 the sample was probabilistic sample with 2,000 units from the Central register of population of the Republic of Slovenia. Surveys were conducted face-to-face in households. The research population was the general Slovenian population, aged 10-74. The number of young people aged from 10-18 in the sample was 232 in 2004 and 150 in 2005. The topics researched were very broad but with respect to security and children the following should be highlighted: security issues on the internet (spam, viruses, personal information abuse), the usage of the internet by children and young people (an overview of activities, such as playing games, sending emails, searching for information, downloading, etc.). In terms of discipline we could classify research as based in methodological studies and informatics. The research was funded by the National Government. The report is not available.

¹ Benefits include parental monitoring of children's whereabouts and children's feeling of safety. Several risks were identified, such as abusive text messages, bullying, unintended expenses; Risks included parents lack of awareness of children's mobile phone usage; children's easy access to inappropriate and potentially illegal contents; exposition to chat and datelines; vulnerability to marketing, both while surfing the internet and using mobile phones; and loss of privacy).



b) *RIS- Web activities*. This was conducted in December 2004, in the Centre for Methodology and Informatics). The method used was computer assisted telephone interview. The sample was a probabilistic sample with 2,346 people aged 10-75 (the general Slovenian population). The topics researched with respect to security and children were security issues on the internet (privacy, viruses) and children and the internet (inappropriate content on internet, what kind of web sites do children visit). In terms of discipline we could classify research as being based in methodological studies and informatics. The research was funded by the National Government. The report is not available.

c) *RIS-Information and communication technologies*. The fieldwork was conducted in April and May 2005 in the Centre for Methodology and Informatics. The method used was computer assisted telephone interview. The sample was probabilistic sample with 2,000 units from 10 to 75 (in the general Slovenian population). The topics researched were very broad (mobile phones, social networks, digital divide, lifestyles) but with respect to security and children three topics stand out: children and the internet (limited access for children), Web site visiting (using the mobile phone, PocketPC, laptop) and children and mobile phones. In terms of discipline we could classify the research as being based in methodological studies and informatics. The research was funded by the National Government. The report is not available

d) *RIS-DCO 2006*. The fieldwork was conducted in September 2006 in the Centre for Methodology and Informatics. The method used was computer assisted telephone interview. The sample was probabilistic sample with 607 (first part) + 605 (second part) people aged from 10-75 (in the general Slovenian population). The topics researched were broad but with respect to security and children the most important topics are usage of internet, internet security and internet abuse questions. In terms of discipline we could classify the research as being based in methodological studies and informatics. The research was funded by the National Government. The report is not available

e) *The information and participation needs of young people in Ljubljana and surroundings*. The research was conducted by MISSS (Youth Information and Advice Centre of Slovenia). The fieldwork was conducted in September and October 2004. The sample consisted of 760 young people from 12-17 from the Slovenian capital Ljubljana and its surroundings. The method used was questionnaire filled in by pupils of primary and secondary schools. The topics researched were: information access, information literacy, leisure and participation on the internet. In terms of discipline we could classify the research as being in youth studies. The research was funded by the National Government. The report is available online (in Slovene): www.miss.org/files/mladi_porocilo_raziskave.pdf.

f) *STOPline research project*. This is a student research project for STOPline (the Hotline within the Safer internet Plus Programme) under the supervision of Bojana Lobe and Vasja Vehovar and conducted with a non-probabilistic sample of 299 primary (10-14 years) and secondary (15-19 years) school pupils and students (20+). In addition, three focus groups were conducted on primary (10-14 years) and secondary (15-19 years) school pupils and students (20+) with 7, 9 and 9 participants. The topics researched were: usage of the internet, attitudes towards potentially harmful contents, pedophilia content

and attitude towards it, hate speech and attitude towards it, how to report harmful and illegal content on the internet, techniques for increasing awareness of potentially harmful and illegal content on internet, and a comparison of perceptions of danger in real and virtual worlds. In terms of discipline we could classify the research as being based in methodological studies and informatics

As regards gaps, studies like SAFT Norway 2006 should be conducted in order to gain a more in-depth insight into topics concerning internet usage and online risks amongst Slovene children and youth. Very little is known about what the children actually do online, how much parents are aware of their online activities and how the rules are set by parents and accepted by children and youth. Do Slovene parents actually sit with the children, as they reported in the latest RIS survey? How much personal information do Slovene children and youth reveal online, have they got any experience with pedophilia or child pornography? A large-scale nationwide quantitative study, supplemented by qualitative study would be needed to get a better picture.

Spain

Overview of national research

National research is mainly concerned with use habits and does not pay much attention to potential risks. Nearly all the studies use a quantitative methodology and although the studies have been funded by a public institution there is a lack a connection with any academic discipline.

Main features of national regulation

Although national legislation mainly follows EU legislation the Government has created some specific regulation concerned with e-commerce and information society in general. In 2003 Spanish legislation was changed and the possession of pornography involving children became a criminal offence (art.187 and art. 189, LO 25 November 2003).

National research status

Primarily, a public institution, such as the Government, or a particular ministry has funded nearly all of these national studies. There is only one study funded by a commercial company and supported by a private academic institution. As far as their main target is concerned, most of the studies concentrate on studying minors' and young people's behaviour patterns. There is one study which analyses households with children over 10 years of age. The population frame of these studies is between 10-14 and 19 or older. All of the research focuses on age and gender differences.

Regarding methodology, there is one study that combines qualitative and quantitative methods, the other f5 are exclusively quantitative. Nearly all of the surveys were conducted either face-to-face or online/by e-mail. Two of them used paper self-completion for collecting parents' and university students' answers. The qualitative methods used in the mixed study combined three different types of interviews: individual interviews, focus groups and triangular groups.

The size of the samples used in the studies ranges from nearly one thousand (875 questionnaires) to 4,000. Several studies involved around

1,000 interviews, one conducted 4,000 and there is another one which studies 3,066 households which means altogether 7,045 individuals.

As far as the disciplines involved are concerned, one of the studies is sociological and there is a commercial one that studies the potential market for mobile phones and online technologies. But most of them lack a clear connection with any academic discipline. They mainly concentrate on studying children's and young people's online habits. All the research topics concerned internet use habits such as access, usage and interests and activities. Not much attention has been paid to potential risks online. Two studies do not pose any questions about risks, whilst three of them each ask only two questions about this topic.

As far as the regulation of online technologies' use is concerned, only two studies ask questions about parents' styles of regulation. There is only one study that pays attention to parents' internet experiences, examining their competence and attitudes to online technologies.

In sum, there are two main gaps in Spanish fieldwork about minors and online technologies.

The first one is related to research content and could be due to a lack of awareness about online risks for children and minors in general. Although 3 out of the 6 studies analysed state that they try to promote safety in the use of online technologies, in reality they mostly concentrate on studying habits. The second gap is a methodological one. All the studies analysed have a totally or predominantly quantitative approach to the main issue, and only one of them combines the survey with some qualitative interviews. As a result, the latter study has a much wider overview of the issue. This is the only study that asks questions about risks, parents' regulation, and parents' internet experiences as a whole.

Sweden

Overview of national research

Eighteen national research projects/reports on children and the internet in Sweden have been registered for EU Kids Online during 2006. They have been carried since 1995, mostly at the universities. The projects/reports cover a wide range of topics. Relatively few reports focus on risks and safety – and these are mostly financed by the authorities. About half the projects used quantitative methods, about half qualitative methods.

Main features of national regulation

The national regulation follows EU legislation and Swedish law in general (ie, what is forbidden in society is forbidden online). A special law/prohibition of file sharing was introduced recently.

National research status

18 national research projects/reports in Sweden on children and the internet have been registered in the EU Kids Online repository during 2006. More research reports have been identified but will be registered during 2007. The general summary picture of the research projects below will, however, not change drastically when the rest of the reports are added. (Naturally, nothing can be said of possible new projects during the coming

years). The fieldwork for the different projects is evenly spread between 1995 and 2006, with a slightly fewer studies from 1995-1997.

Most of the projects are organised at universities and university colleges, and of these projects most are also financed by the universities, etc., in the form of PhD theses or as the university teachers' own research, while a few are financed by national research councils. About half of the university, etc. research is conducted within the discipline of media and communication studies and about half within pedagogy, computer sciences, ethnogeography and theology.

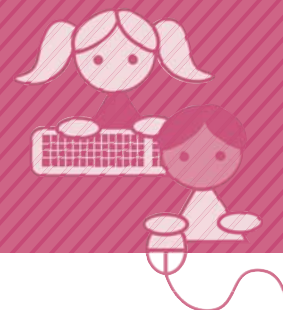
Fewer projects/reports are carried out by research institutes and financed by the national or a regional government/ministry/authority or by multiple sources. About half of the projects used quantitative methods and about half qualitative methods (a few projects used both quantitative and qualitative methods). About half of the projects focus mainly on children roughly 8-15 years of age and about half are mainly on youth aged 16 and over (and a few projects focus on both children and youth). Three of the projects include adults generally and two projects include parents.

The topics of the research projects/reports are varying and cannot be easily summarised. However, they tend partly to be associated with financing. Relatively few projects deal with risks and safety online. This characterises 5 of the projects – and four of these are those financed by the national or a local government/ministry or the EC (while one project is an on-going PhD thesis at the university). Two of these projects are also the ones that include parents (ie, questioning what parents believe their children are doing on the internet, how parents mediate and control, etc.).

The quantitative surveys based on larger samples deal with access to and use of the internet and have detailed questions about what children and/or young people are doing on the net. Some of these surveys also include adults generally and consist of repeated measurements of all media use every year (from 1995). There are also surveys extending the topics to other leisure activities, value patterns and backgrounds, thus thoroughly analysing and presenting patterns of different lifestyles among different internet users.

The qualitative studies are based on smaller groups of young people are most often analysing a delimited area in-depth from the young people's perspectives, seeing the young as (active) agents/users/meaning-makers of the internet in their everyday lives. A few examples of topics are: how children regard e-mail, chatrooms and the internet as an arena for communication; gender- and identity work in an internet community; young players' styles of self-presentation and identity performances in an online game world; how websites are being used as a resource for seeking knowledge; teenagers' contacts with the bible on their own terms on an ecumenical website; and how the internet and mobile phone affect the social and geographical patterns of interpersonal contacts.

All the reports are public and available (ie, they can be received or bought) in print, and half of them are also available online.



The Netherlands

Overview of national research

We feel that the Netherlands is well equipped with quantitative data compared to other countries. If any 'gaps' in research exists, we may mention that in the Netherlands there are relatively few qualitative studies, there is hardly any information on kids aged 10 years and younger, social network data are lacking and there are few longitudinal studies.

Main features of national regulation

In the Netherlands European legislation is implemented after careful national consideration. Legislation that is not based on European instructions is limited. To a large extent the Netherlands is favouring self-regulation. Presumably the Netherlands does not rank among the European countries which have strong regulation.

National research status

The Netherlands is rich in quantitative data. Most national research in the Netherlands comes from communication studies, social psychology and sociology, and is funded by the Dutch government or the Dutch National Science Foundation. The results are partly available in English language scientific journals. Other studies were published in Dutch written monographs (some of them containing summaries in English). We feel that the Netherlands is well equipped with data compared to other countries. If any 'gaps' in research exists, we may mention that in the Netherlands there are relatively few qualitative studies, there is hardly any information on kids aged 10 years and younger, social network data are lacking and there are few longitudinal studies.

A series of large scale national survey among the Dutch population present representative data on access to ICTs (especially PC's and the internet), use of these ICTs and digital skills for all age groups, including a large survey on ethnic minority groups (LAS) in the 50 largest cities.

Other more in-depth surveys which are mostly directed at 10-18 year olds present more detailed information on topics like online activities, concerns and frustrations when online, gaming, social networking, sexual harassment, identity and friendship formation and the effects/consequences of going online (eg, development of social skills, self-esteem, well-being).

Prominent in the Netherlands is a research group organised around Professor Dr Patti Valkenburg who started a research programme on young people and the use of ICTs. Since early 2005 they have organised several correlation and experimental studies. In June 2006 they fielded the first waves of two longitudinal studies, one on the uses and effects of online communication and one on the uses and effects of sexually explicit online material. So far they have conducted six surveys among 10-18 year olds. Most studies have sample sizes between 800 and 1,200 respondents.

The SCP has so far also conducted two in-depth studies among 13-18 year old pupils in secondary education. This work is part of a research programme on ICT and Society that Prof. dr. Jos de Haan is carrying out. The two surveys provide information on online access, online usage, online competencies/skills, online interests and activities, social networking online, effects/consequences of going online and internet safety. The data were collected at schools in the Netherlands. A total

of 1,213 pupils in 2001 and 1,561 in 2005 completed a questionnaire. In 2005 a letter and questionnaire was also sent to one of the parents of each student of which 1,080 parents replied.

The use of ICTs in school has also been the subject of research in the Netherlands. It deals not only with the number of computers and use of these computers in schools, but also with the extent in which schools and teachers use the benefits of ICT in the learning process and in sharing knowledge, for themselves and their pupils.

The United Kingdom

Overview of national research

Since 2000, there have been sufficient UK based research projects to provide a good picture of children's online access, use and activities. Most of this is quantitative, with some qualitative and mixed methods, several studies combine the views of parents and children, and much of the research is readily available online. The challenge will be to keep this picture updated, and to fill the gaps (young children, certain risks, new platforms, etc).

Main features of national regulation

The 2003 Sexual Offences Act made grooming a child online for sexual purposes illegal. Most legislation used to apply to the internet predates this technology (eg, the Obscene Publications Act, laws on inciting racial hatred, etc), and the Home Office is currently examining whether legislation needs to be reviewed or extended. Generally, the UK favours a self-regulatory approach on the part of industry, combined with an emphasis on individual responsibility (via policies for awareness raising and internet/media literacy).

National research status

For work published between 2000 and 2007 we found nearly 41 reports in the UK (at this stage). These are all single country studies. There are also a further seven multi-country studies that include the UK.

There appears to have been a growing concern about risks to children as regards internet access and use, with a clear increase in funded research outputs from 2002-5 followed, it seems, by a decline in the last year or so.

Most studies are specifically focused on children, young people and the internet. However, the data repository also includes some studies that take a wider perspective that includes children and the internet as one dimension.

Most of the projects identified have a single funding source, although there are some cases of joint funding. For projects with a single funder, the most common sources of funding are the national research council, commercial companies and charities.

The greatest proportion of studies identified in the UK is quantitative. There are a number of studies combining both approaches and fewer that adopt only a qualitative approach. Industry and the regulator mainly fund quantitative studies. Most of the surveys conducted are national in coverage,

claiming to draw representative samples. Research that is solely qualitative appears to be chosen when an in-depth examination is required.

The majority of participants in the research were children themselves, the next most common strategy being to sample parents as informants on their children's internet access and use. There are a few studies of teachers or other adults. A number of studies included both parents and children. The majority of studies deal with children aged between 9 and 16.

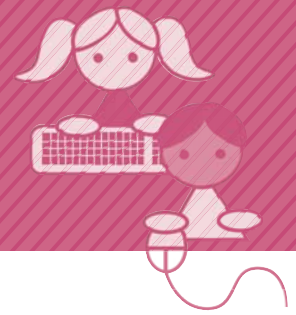
The most common academic discipline across the research identified is that of education. Apart from that, there is a scattering of other disciplines (eg, media studies, geography), with rather few studies from sociology or psychology. In a number of cases, it was not possible to discern whether the project was framed by a particular academic discipline. And for many there appears to be no research framework guiding the study at all.

The most commonly researched topics are children's internet access, use, and 'interests and activities'. The next most researched topic is children's skills, concerns and frustrations when online. Approximately half of the studies identified address online risks. Of these, more concern risks of contact with strangers, giving out personal information, and encountering what we might call 'hostile content'. There are some studies of cyberbullying, pornography and privacy issues, and just one each on commercial exploitation, misinformation, illegal downloading, hacking, and cyberstalking. There are as yet no studies of gambling or the use of challenging sites (eg, pro-anorexia, suicide, etc).

The studies initiated by charities (sometimes with commercial partners) tend to focus on risks, parental knowledge and concerns and how the use of the internet by children is regulated. Studies funded by the Government, the regulator, research institutes and the national research council are more orientated to the potentially positive aspects of the Internet.

There is a fair amount of research on parents and parent-child interaction. The most common focus is on parents' regulation of children's use of the internet, with a few studies on parent's knowledge of children's practices online, parents' awareness of risks, children's reactions to regulation, parents' attitudes to and concerns about online technologies and parents' competencies.

For most studies funded by the Government, the National Research Council and the Regulator the reports are online; only about half of the reports relating to studies funded by charities and companies are online. In several cases, almost all related to work funded by charities and companies, only a summary of the research is. Academic research is often available as a book, book chapter or academic articles. Only one (raw) dataset was accessible online.



Endnotes

- 1 Source: Eurobarometer Survey (May 2006) Safer Internet, Special Eurobarometer 250 / Wave 64.4, Brussels.
- 2 Terminology is difficult here. We refer in this report either to 'children and young people' (the preferred term for many) or just to 'children'. Where research applies only or mainly to teenagers, we make a distinction between (younger) children (0-12) and teenagers (13-18). Our focus, to be precise, is on those under 18 – legal minors in both EC and UN frameworks. Terminology for the technology at issue is equally problematic. The EC Safer internet Programme centres on 'the internet and online technologies'. This category intersects with the broader terms 'digital media', 'ICTs' and 'new media', but is restricted to that which is online, a restriction we follow here. In practice, most research concerns 'the internet', generally the 'fixed internet', for research on children's use of online technologies via mobile phone, games console, etc., remains limited or non-existent in most countries.
- 3 We would like to thank all the contributors to this work within EU Kids Online, with particular thanks to Angeline Khoo and Mizuko Ito, from our International Advisory Board, for their helpful comments on an earlier draft of this report.
- 4 EU Kids Online thanks all those who have contributed to discussing, critiquing or otherwise helping with the preparation of this report.
- 5 For example, as some studies cover the internet as one ICT or one example of media/new media/multimedia amongst others (eg, in the UK, the Netherlands, Norway, Germany), or else focus on another technology but include data on internet use. Some studies focus on children and youth in general, or youth and media, where once again use of the internet is one activity amongst other (eg, Germany, Estonia). Many studies of the internet or ICTs cover the population in general, but also some children, although the lower age of these studies vary (eg, starting with 14 year olds, 15 year olds). Occasionally we have research looking at time use data which also includes internet (eg, the Netherlands) or studies of particular groups such as ethnic minorities, that picks up children's experience of the internet amongst other facets of their life (the Netherlands). Some studies have a very specific such perspective, such as usability studies (Belgium), addiction research (Belgium), police issues (Greece) or a topic such as HIV/AIDS communication (Estonia).
- 6 In the map showing studies by country, the figures include single and multi-country studies.
- 7 Croatia, Finland, Hungary, Ireland, Italy, Luxembourg, Latvia, Lithuania, Macedonia, Malta, Romania, Slovakia.
- 8 Care is needed regarding exactly who was interviewed. In some countries, it was the 'General European public over 15 years old'; sometimes it was 'caretakers' with children aged 17 or under; sometimes it was a sub-sample of caretakers claiming that the children used the internet (since there were only 3,000 of this last group in the European sample we cannot do national comparisons – but we do!). Unfortunately, the survey did not ask caretakers if they were parents of the child asked about, leaving open the possibility that respondents were other relatives or household members.
- 9 Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Portugal, Spain, Sweden, the Netherlands and the UK.
- 10 Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia.
- 11 Bulgaria, Romania, Croatia and Turkey.
- 12 Source: Eurobarometer Survey (May 2006) Safer Internet, Special Eurobarometer 250 / Wave 64.4, Brussels.



Printed on recycled stock

Design by: **LSE Design Unit** (www.lse.ac.uk/designunit)

The London School of Economics and Political Science is a School of the University of London. It is a charity and is incorporated in England as a company limited by guarantee under the Companies Act (Reg No 70527).

The School seeks to ensure that people are treated equitably, regardless of age, disability, race, nationality, ethnic or national origin, gender, religion, sexual orientation or personal circumstances.

The information in this report can be made available in alternative formats, on request. Please contact Dr Leslie Haddon, Email: leshaddon@aol.com



Co-funded by the European Union



THE LONDON SCHOOL
OF ECONOMICS AND
POLITICAL SCIENCE ■

Contact details

Professor Sonia Livingstone and Dr Leslie Haddon
Department of Media and Communications
The London School of Economics and Political Science,
Houghton Street, London WC2A 2AE, UK
f +44 (0) 20 7955 7248
e s.livingstone@lse.ac.uk / leshaddon@aol.com

The EU Kids Online thematic network has received funding from the European Community's Safer Internet Plus programme. The authors are solely responsible for the contents of this report. It does not represent the opinion of the Community and nor is the Community responsible for any use that might be made of information contained in it.

ISBN 978-0-85328-350-8