

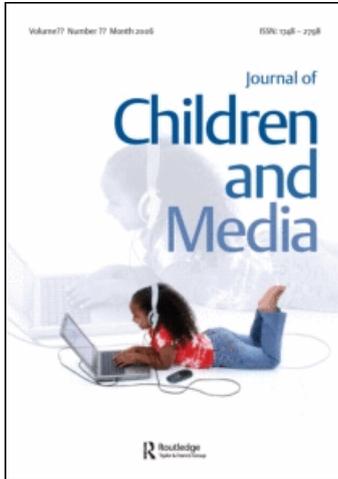
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A SHARED RESPONSIBILITY

Similarities and differences in the factors that shape online risk assessment for children in Europe

Joke Bauwens, Bojana Lobe, Katia Segers and Liza Tsaliki

Children's growing use of the Internet creates both opportunities and risks. Collecting and comparing empirical findings on risks and opportunities experienced across 20 different European countries shows significant differences between them. Using Qualitative Comparative Analysis (QCA), this article investigates which factors contribute towards a high degree of online risk experienced by children across these countries. The research shows that patterns of similarities and differences do not seem to coincide with regional, political, and historical divides across European Union countries. The findings seem to endorse the multilayered approach of multi-stakeholder governance, which stresses the co-responsibility in securing children's online safety. However, one of the most important country conditions explaining high risk appears to be the lack of positive online content provision.

KEYWORDS children; cross-national comparison; Europe; Internet; governance; multi-stakeholders governance; online risks; qualitative comparative analysis (QCA)

Introduction

All over Europe, although not at the same speed across and within countries, children and young people are gaining access to the Internet (Eurobarometer, 2007, 2008). The changing media environment and Internet use of children creates important opportunities and risks at the same time. Although the extent to which online technologies are associated with opportunities and risks for children and their families has recently attracted significant academic discussion (Livingstone, 2008; Wells & Mitchell, 2008), a clear and detailed taxonomy of risks was first offered by Hasebrink, Livingstone, Haddon, and Olafsson (2009). This taxonomy is based on international empirical evidence on risks and opportunities, experienced across 21 different European countries. Collected and compared within the European EU Kids Online network, this evidence demonstrates that the degree to which children are dealing with online risks and opportunities varies substantially across different national and cultural contexts (Livingstone & Haddon, 2008). Not only does the degree of risk experienced differ across each one of the countries examined, but there are also variations in the use of Internet and other online technologies.

As the issue of children's Internet safety is a priority agenda item for the general public, the media, and the national and European policy-makers, the aim of this article is to look at factors that help explain the likelihood of high online risk assessment in different European countries. The concept of assessment refers here to the extent to which countries

report on and are aware of the online risk experiences of their children population. The concept of online risk, as used in this article, refers to the general state of risk experiences children are dealing with. Rather than going into specific types of Internet-related risks (e.g. grooming, contact with paedophiles and strangers, privacy invasion, racist/hate content; Hasebrink et al., 2009), this article considers the degree of online risk assessment. The estimation of the degree of online risk experiences is based on secondary data, which were collected and aggregated on a country level within the EU Kids Online project. This classification is built on different sources and interpretations of online risk (e.g. actual experiences, risk awareness, risk perception). The international and large-scale scope of our analysis and the lack of one consistent survey on risk experiences of children on a European level left us no choice than to operationalise the degree of online risk through data and sources at our disposal, as diverse they may be.

Although the issue of children and their exposure to online risks has attracted a lot of attention, the regulatory aspects have scarcely been investigated. We start from the assumption that the degree to which different European countries are aware of and report on the online risk experiences of their children coincides with social, cultural, and economic differences across old and new, North and South, West and East, as these traditional divides explain, to some extent, differences in national ICT policies (Capello & Spairani, 2008; Marsden, 2005). Following from this, we explore two research questions in this article:

1. Which factors are contributing towards the degree of online risk experienced by children in the different European countries?
2. To what extent do patterns of similarity and difference coincide with regional, political, and historical divides across European countries?

This article first contextualises children's use of the Internet and the way this use is being regulated. It then discusses the research method used, Qualitative Comparative Analysis (QCA) before, third, examining which factors shape online risk experiences of children in different European countries.

Children, Online Risks, and Policy

Although many studies have shown that Internet technologies do have a creative and educational potential (e.g. information retrieval, music and movie downloading, and communicating with friends) (Buckingham, 2006; Holloway & Valentine, 2003; Loveless, 2002), concern about children's exposure to risks and the desire to protect young people seems to be the dominant frame both in the public debate and the policy sphere (Oswell, 2008). Bearing in mind cultural differences across Europe, the media prefer to draw attention to the emerging risks and concerns regarding Internet technology, thus promoting a notion of the Internet as a scary and sinister place, the access to and use of which needs to be regulated and controlled (Livingstone & Bober, 2006; Tsaliki & Chronaki, 2008). Policy-makers in particular seem to invest more in preventing and fighting online risks, rather than in stimulating the considerable opportunities afforded by the Internet. For the European Commission, concern about risks and the desire to protect seem to be the most important drive in taking measures and developing policy concerning children and the Internet, as proved by programmes such as the Safer Internet Programme and special Eurobarometer surveys.

Still, who governs the relationship between children and the Internet? Oswell points out three traditional centres of action: government (national and supranational/European,

including the educational system), industry, and parents (Oswell, 1999). These three agents are jointly responsible for the protection and education of children in how they use the media and the Internet in particular.

In tackling the issue of Internet content regulation and child protection, the European Commission draws on a form of governance that Oswell describes as “advanced liberal”, setting mainly pragmatic objectives and making both the industry and the parent responsible for content regulation. This liberal and pragmatic approach is the European answer to the problem not only of defining problematic content, but also of how to regulate across the important legal and cultural differences between the member states (Oswell, 1999, 2008). Meeting these pragmatic objectives of the European Commission, the (UK) industry has been constructed as a responsible actor. The responsibility of the industry and the importance of self-regulation are therefore being stressed firmly in several research and policy documents today (e.g. Byron, 2008).

But to what degree do the intensity of regulation and governance, and the degree of self-regulation of the industry, as well as educational measures, contribute to the empowerment of children themselves and the decrease of risk? Oswell stated 10 years ago that European countries are being hesitant in resolving the problem of risk on the Internet through legislative measures (Oswell, 1999), which is why, subsequently, the European Commission promoted greater industry self-regulation (Oswell, 2008). This was also one of the major reasons why the state has shifted from traditional forms of government to different modes of governance (market, hierarchy and network) (Collins, 2006), from regulation and statutory mechanisms to devolved and aligned authority (Oswell, 1999), or in Marsden’s words, “an amorphous phrase to describe power relations differentiated from the ‘hard’ rules of government” (Marsden 2008, p. 116). This evolution has been well documented for the UK by Collins (2006, 2008). Akdeniz defines governance not as a choice between centralization and decentralization, but as regulating relationships in complex systems, such as the Internet, which provides indeed a great challenge for governance (Akdeniz, 2001). Also, as Marsden points out, the European “market-led governments” treat the industry benevolently, inciting them to develop co- or self-regulatory institutions and compacts. However, this scheme of governance has paid little attention to the social and economic rights of consumers, being a “new generation of ‘Web 2.0’ consumer-citizens who are also producers” (Marsden, 2008, p. 120).

Online Risks and Multi-Stakeholder Governance

The multi-stakeholder governance or “network governance” (Collins, 2006, 2008) refers to the development of public policy in an increasingly complex environment in which public authorities, the private sector, and civil society are working together in a network (Akdeniz, 2001; Hemmati, Dodds, Enayati, & McHarry, 2002). This multilayered approach is especially argued for in relation to Internet governance issues, where it is an inherent characteristic of the network that laws and the conduct to which those laws are directed, will cross national borders (Dutton & Peltu, 2007; Malcolm, 2008). From this perspective, safeguarding and regulating children’s online use and experiences, is believed to be a shared and active responsibility of people and organisations directly involved with children. As such, co-operation between governmental organisations, the industry, the educational system, and children themselves is considered to be essential in shaping a safer Internet environment for young people (Akdeniz, 2001; Lievens, 2007; Oswell, 1999, 2008), in which

all these agencies are “gatekeeping the incoming content in our homes” (Livingstone & Bober, 2006, p. 96).

Drawing on a multi-stakeholder or network governance approach, it is assumed that four stakeholders, i.e. children, the government, the industry, and education, are inherently interrelated (Dutton & Peltu, 2007; Marsden, 2008; Oswell, 2008). The analysis presented in this article aims to probe the combined impact of these stakeholders on countries’ risk assessment. These spheres of action are operationalised through seven conditions that were examined within the EU Kids Online project.

We have established the need to study further children’s usage of online technologies in order to understand their level of exposure to online risks (condition one in our analysis below, Section 5). Research shows that the scale of Internet use often correlates with exposure to online risks (Hasebrink et al., 2009). A legal framework (condition two) is in place within each national context, whereby special provisions are made for the protection of these younger users. As expected, countries exhibit varying degrees of law enforcement and development when it comes to regulation of computer crimes (Hasebrink et al., 2009; Oswell, 2008). The extent to which governments attempt to promote an “information society” within their realm is assessed through their Networked Readiness Index¹ (condition three). Although these campaigns and initiatives are not aimed at raising awareness about Internet safety issues, their absence or presence in the European countries gives an indication of the efforts governments put in the preparation and expansion of the Information Society.

Within any national context, the role of education (condition four) is crucial whether from a co- or a self-regulatory approach. Although the shaping role of education is broader than the specific media education initiatives at schools (e.g. the impact of the educational background of parents when monitoring the Internet use of their children, the correlation between education and Internet use of children themselves (e.g. Bauwens, Pauwels, Lobet-Maris, Pouillet, & Walrave, 2008), special attention is paid to what schools and governments are investing in media education (media literacy and ICT learning), because of the importance both academics and policy-makers attach to it (Oswell, 2008).

As one of the key industry stakeholders, Internet service providers—ISPs (condition five) are deemed important to the extent that they offer safety tips and filters, as well as parental control functions that facilitate parental management of children’s online use (Hasebrink et al., 2009). This brings us to the availability of online content catering to children’s needs (condition six), whether from the public or the private sector (Hasebrink et al., 2009). Last, all kinds of awareness raising initiatives (condition seven) regarding negative online impact are believed to have beneficial effects on children’s online behaviour (Hasebrink et al., 2009).

Method and Analysis: Grasping the Complexity

The findings are based on a secondary analysis of existing data sources and findings, both qualitative and quantitative, which were drawn from a pool of various studies collected in the EU Kids Online data repository and from the national reports produced within this project. We also heavily rely on one of the recent reports that compare children’s online opportunities and risks (Hasebrink et al., 2009). Twenty European countries, for which the data sources and findings were available from the project, were selected to be included (see Table 1 for an overview). Although this cross-national comparison does not

TABLE 1
Raw data for QCA combined with truth table.

Country	Children's use of Internet (%)	Development of the legal framework	Networked Readiness Index	Developmental of educational policy	Role of ISPs	Degree of online content provision	Degree of awareness-raising	Degree of online risk
Austria	51 (1)	5.70 (1)	4.91 (1)	1	0	1	1	0
Belgium	65 (1)	4.85 (1)	4.26 (0)	1	1	1	1	0
Bulgaria	29 (0)	4.27 (0)	3.61 (0)	0	0	0	0	1
Cyprus	33 (0)	3.88 (0)	4.06 (0)	1	0	0	0	0
Czech Republic	57 (1)	4.21 (0)	3.58 (0)	1	0	0	1	1
Denmark	70 (1)	6.01 (1)	5.36 (1)	1	1	1	0	0
Estonia	68 (1)	5.90 (1)	5.57 (1)	1	1	0	0	1
France	54 (1)	5.34 (1)	4.86 (1)	1	0	0	0	0
Germany	47 (0)	5.76 (1)	4.64 (1)	1	0	0	0	0
Greece	26 (0)	3.63 (0)	3.65 (0)	1	1	0	1	0
Ireland	42 (0)	4.91 (1)	4.50 (1)	1	1	1	1	0
Italy	36 (0)	4.27 (0)	3.67 (0)	1	1	0	0	0
Netherlands	72 (1)	5.39 (1)	4.58 (1)	0	1	1	1	1
Norway	68 (1)	5.63 (1)	4.95 (1)	1	0	0	1	1
Poland	47 (0)	3.69 (0)	3.04 (0)	0	0	0	1	1
Portugal	38 (0)	4.94 (1)	5.14 (1)	1	0	0	0	0
Slovenia	57 (1)	4.82 (1)	4.25 (0)	1	1	0	1	1
Spain	37 (0)	4.77 (1)	3.80 (0)	1	0	0	0	0
Sweden	66 (1)	5.74 (1)	5.41 (1)	0	0	0	1	0
UK	65 (1)	5.54 (1)	4.44 (1)	1	1	1	1	1

Note: The first column displays percentages, the second and third mean values. In these columns the dichotomised values (0 and 1 values) are bracketed. The fourth, fifth and sixth columns only present dichotomised values.

comprise all European countries, it represents relatively well the diversity of the European Union. The different EU-accession generations are included, from the oldest member-states that joined in the 1950s and 1970s (Belgium, France, Germany, Italy and the Netherlands in the 1950s; Denmark, Ireland and the UK in the 1970s), to newer member-states that joined the EU during the 1980s and 1990s (Greece, Portugal, Spain, Sweden), and the latest twentieth-first century enlargement wave of the EU (Bulgaria, Cyprus, Czech Republic, Estonia, Poland, Slovenia). Also, one non-EU-member state (Norway) is included in the analysis. Regional differences are also covered in a balanced way: seven Western or Continental European countries, five Mediterranean countries, four Scandinavian/Baltic countries and four Eastern and Central European countries are taken into consideration. Last but not least, from a political point of view, we can make a distinction between, on the one hand, the established representative democracies (coinciding with the oldest EU member-states), the rather young democracies (matching with the Mediterranean countries that joined the EU in the second wave) and the recent democracies that emerged in the post-Soviet era.

Qualitative Comparative Analysis (QCA) is used to bring analytical rigor to the large amount of data available on each country as the approach is particularly appropriate to address issues dealing with cross-national comparisons. QCA is an analysis strategy which aims at comparing multiple cases, seeking “to gather in-depth insight in the different cases and capture the complexity of the cases” whilst still pursuing some level of generalisation (Rihoux, 2006, p. 680).

The QCA is particularly useful when it is assumed that the phenomenon under study (the “outcome variable”) is shaped by the interaction of multiple conditions, possibly in different ways across the cases. Consequently, QCA enables the researcher to identify the core conditions that shape the particular phenomenon under study for a specific case. Termed “multiple-conjunctural causation”, this permits multiple alternative explanations within the data set, in recognition of the specificities of the cases themselves.²

Conditions Explaining the Degree of Online Risk Assessment

Applying the QCA procedure to our research question requires an explanation of the cases, the phenomenon and the shaping factors (or conditions). As already mentioned, our analysis involves 20 countries (our cases), about which we have acquired various data throughout the project work of EU Kids Online.³

In line with our main goal to explain what key factors constitute the presence or absence of a high assessment of online risk in different European countries, we defined the phenomenon under study (that is, the outcome variable) as “high degree of online risk among children” (in Table 1, this is represented as “online risk”). In order to assess the high degree of online risk perceived and experienced by children all over Europe, we relied on the overall classification of the EU Kids Online countries with regard to online risk perception as developed by Hasebrink et al. (2009). Based on a secondary analysis of existing data sources and findings, the countries have been classified in three groups: countries with low online risk (Cyprus, France, Germany, Italy); countries with medium online risk (Austria, Belgium, Denmark, Greece, Ireland, Portugal, Spain, Sweden); and countries with high online risk (Bulgaria, Czech Republic, Estonia, Netherlands, Norway, Poland, Slovenia and the UK). As the aim of our model is to explain what combinations of specific factors affect the presence or absence of a high assessment of online risk, we

assigned value 1 to those countries that are classified as high online risk countries, and value 0 to those that are classified as medium and low online risk countries.

Due to lack of official statistics, the seven conditions that are assumed to determine the degree of online risk are operationalised mainly on the basis of the national reports resulting from the EU Kids Online project and national expert estimations. However, the concretisation of the first three conditions is based on official statistics (Eurobarometer, 2007, 2008; SAFT, 2006; World Economic Forum, 2007).

1. *Children's Use of the Internet ("child's_use")*

The condition displays the percentage of children's use of the Internet across countries.⁴ Based on the distribution of countries within these two values, countries with children's Internet use above 50 per cent were assigned value 1 (higher use) whilst those with lower percentages were assigned value 0 (lower use).

2. *Development of the Legal Framework ("legal_fr")*

This variable is based on the World Economic Forum (Executive Opinion Survey 2007), which evaluates the laws related to ICT. The scale used is from 1–7, where 1 means non-existent, and 7 means well developed and enforced. According to country groups based on mean values, countries with a mean value higher than 4.74 were assigned value 1 (more developed legal framework), whereas all others were assigned value 0 (less developed legal framework).

3. *Networked Readiness Index ("NRI_i")*

This factor refers to the component "Government success in ICT promotion". Experts have compared, on a scale from 1–7, the success of ICT promotion (not awareness) campaigns and initiatives; 1 means not very successful, and 7 means highly successful (World Economic Forum, 2007). In the process of dichotomisation, countries with an index value higher than 4.3 were assigned value 1 (more successful in governmental promotion of ICT) whilst those below 4.3 were assigned value 0 (less successful governmental promotion of ICT).

4. *Development of Educational Policy ("edu_pol")*

This accounts for media education in schools (a. ICT learning, b. other initiatives regarding ICT, c. media education): if at least one of these three is affirmative in a specific country, the condition value is 1, otherwise (negative, or no data) is 0.

5. *Role of ISPs ("ISPs")*

This condition is dealing with the influence of ISPs in ensuring online safety for children. Value 1 means that ISPs play an active role in promoting and reinforcing online safety, whilst value 0 means that ISPs are only offering typical paid "safety packages" or they provide (almost) no warning, advice or information on safety issues for children.

6. Degree of Online Content Provision (“provision”)

This condition aims to capture a significant provision of positive online content for children. Value 1 means that the provision is “high and between high and medium”, whilst value 0 means the provision is “medium and low”.

7. Degree of Awareness-Raising (“awareness”)

This condition deals with whether there are large-scale activities related to concrete online risk-related issues in each country. Value 1 means that there are either several large-scale initiatives in a country or one complex measure addressing several aspects of an issue, whilst value 0 means there are very little or no activities.

Below, we present a table, which displays the values for each condition (put on view in the columns) and for each country (presented in the rows). The outcome variable, being the degree of online risk assessment, is displayed in the last column. The raw data show some variation across conditions (between-condition variation) and thus each condition is sufficiently different from the other conditions. There is no systematic pattern observed across the conditions which would allow the possible merging of conditions that might be considered conceptually or empirically proximate. Having looked at the within-condition variation (i.e. the variation for each condition), each condition displays enough variation. A sufficient variation is also obtained across the cases.

Similarities and Differences Across Europe

Before taking a closer look at the different causal paths that help us explain the presence or absence of a high degree of online risk assessment, it should be first emphasized that the eight high-risk countries are quite different in historical, regional, and political terms. Also the group of “not high-risk” countries shows considerable diversity. Both Northern and Southern European countries, new and old democracies, and new and old member states can be found in this group. Hence, the likelihood of online risk experiences and risk perception across Europe is a phenomenon that cannot simply be attributed to traditional divides between European countries. Indeed, apart from the Mediterranean countries that all tend to be low high-risk countries (Hasebrink et al., 2009), it is hard, if not untenable, to explain the presence and absence of a high degree of risk from within this traditional framework of thinking. Although the traditional divides in Europe might not play a key part in understanding which countries are facing a high degree of online risk, it is, however, interesting to examine if the different types of configurations of conditions that result in a high or non-high likelihood of risk coincide with the traditional divides in Europe. So, although historical, regional and political differences across the EU do not play a part in the absence and presence of the phenomenon, one of our assumptions was that these differences do come into the interaction between the particular conditions.

For the purposes of our analysis, the raw data was entered into TOSMANA (version 1.3.0.0), an analysis software programme designed for small-number analyses. This produced a truth table (see Table 1) in which we examined if the same configuration of conditions led to a given outcome. No contradictory configurations were observed; therefore all conditions could be included in the analysis.

A first look at the observed cases shows that the combination of the six conditions varies significantly across the countries. No country can be found that shows the same

combination of conditions as another. For instance, the Czech Republic lacks a proper legal framework, governmental promotion is not that successful, ISPs could play a more active role and more positive online content for children could be offered. Looking at other country configurations, we see that children's Internet use is high in all of them, all have quite well developed legal frameworks and there is media and Internet literacy education for children. However, Estonia, Norway and Slovenia are making less effort when it comes to positive online content; and in Norway, ISPs are playing a far less active role in safeguarding online safety. In Estonia, awareness raising actions are less developed. Apart from these national variations, there are several countries that show similar conditional patterns. For instance, Bulgaria and Estonia have lower values on all conditions. Conversely, with a well-established ICT infrastructure and market, the Netherlands and the UK have a higher profile to exhibit in each sphere of action: their ICT legal frameworks are more developed, their governments are quite successful in promoting ICTs, ISPs are actively involved in safeguarding online safety, positive online content provision is high, and awareness initiatives in these two countries are being pursued.

Moving beyond the observed cases and including logical cases to obtain the maximum parsimony, the results of the analysis⁵ illuminate the conditions which are playing a crucial role in explaining a high degree of online risk assessment amongst countries. In order to achieve the shortest core combination of conditions out of the complex set of data, the non-observed cases (logical cases) were included to produce one main minimal formula which itself contains four different combinations of conditions.⁶ The initial results with different casual paths that lead to a high degree of online risk for the observed cases show each country as a conjunctural combination of conditions. In the presentation of the findings we have put the minimal formulas (representing the conjunctural combination of conditions) between brackets.

Note that in presenting the following logical statements, the upper-case letters indicate the presence of the condition and the lower case indicates the absence of the condition. Multiplication (*) indicates a specific combination of conditions (logical operator "AND") whilst a plus sign (+) indicates the alternative combinations of conditions (logical operator "OR").

The first configuration of conditions ($\text{child's_use} * \text{edu_pol}$), significant for Bulgaria and Poland, displays a lower Internet use amongst children combined with relative lag in media and ICT literacy. Hence, even a low level of Internet use is a risky activity for children, especially when this takes place under circumstances where there are no educational initiatives regarding ICT use.

Estonia and Slovenia ($\text{CHILD'S_USE} * \text{ISPS} * \text{provision}$) are facing a different situation. Both countries have very Internet-active children. In addition, ISPs are playing an active role in promoting online safety. However, whilst these two countries are putting effort in structural solutions, children are lacking positive online content to consume that has been designed to address their needs and practices. The combination of all these three factors thus leads to higher online risk.

The configuration of conditions for the Netherlands and the UK ($\text{CHILD'S_USE} * \text{NRI_I} * \text{ISPS} * \text{AWARENESS}$) is again different. Both are considered wealthy Northern European countries and also well aware of what the Internet brings in the life of their children, who are heavy Internet users. In this case, issues are tackled from different angles: the government is successful in promoting ICT use, and the ISPs are very active. Also, both countries have a number of significant awareness raising initiatives on online safety

to account for. However, high level of children's Internet use can also mean that they are more likely to be exposed to risk as they are more active online and constantly pursuing new practices online. Hence, with more children online, more informed use of the Internet also brings along more challenges for policymakers, which can offer an explanation for the higher level of online risks.

The Czech Republic and Norway (EDU_POL * isps * provision * AWARENESS) are equally aware of potential Internet risks to children. Both put a lot of effort in awareness raising and in educating their children about proper ICT use. However, there is little positive online content offered and ISPs are not active in promoting Internet safety, which results in higher online risk in these two countries.

Having explained what led to a high degree of online risk across countries, let us now turn to the countries with a medium and low, i.e., non-high level of online risk. Again, we see countries as configurations of conditions that lead them to low online risk.⁷

In Germany, Greece, Ireland, and Italy (child's_use * ISPS), the low level of online risk assessment seem to be the result of lower children's Internet use combined with a high level of ISP safeguarding activities. Even though in Belgium, Austria and Denmark (PROVISION *(nri_i + isps + awareness)), the government is not very successful in promoting ICT (NRI index) and there is little or no ISP activity in reinforcing online safety, as there is also low awareness raising, these countries do not appear to have high levels of online risk. In this case, the high positive online content provision is the only condition that seems to explain lower online risk.

Sweden (NRI_I * edu_pol * isps) is a unique case within Europe. In spite of a lack of media education and almost no ISP activity promoting online safety, it appears to be the successful governmental promotion of ICT that lowers online risk.

In France, Cyprus, Portugal, and Spain (EDU_POL * isps * awareness), educational policy initiatives, as diverse, small-scaled and fragmented they may be, seem to play a crucial role. All of them being countries where the Internet industry is not taking responsibility and with no large-scale awareness campaigns, the educational system is the only condition that helps explain why a high assessment of risk is absent. In this respect, then, it transpires that one of the lessons learnt is that awareness about potential risks, rather than actual risk experience itself, may also function as an indicator for the perception of risk: in some cases, low risk is a result of low awareness, whereas in others it appeared to stem from low use.

Conclusions

Although Internet-related risks affecting young people's lives have become a major concern both in the public and academic debate, policy decisions still rely on assumed knowledge about which structural factors and conditions are shaping those risks. In this article, we departed from these conjectures and probed the effect of seven conditions that surpass the micro-level of coping with, responding to, and preventing online risks. Based on a QCA of 20 European countries, we have established that risk assessment in different countries show very different patterns, each country possessing its own specific configuration of conditions. Also, the expected traditional divisions between old and new EU member states, old and new democracies, and the different regions in Europe do not coincide with the gap between high and non-high risk countries, as tested in the QCA.

However, some patterns can be observed, especially within the group of high-risk countries. The similarities between Bulgaria and Poland, Estonia and Slovenia, and the Netherlands and UK, are to a certain extent predictable. These two groups of countries not only share a political, cultural, economic and social history, but also show very similar trends in ICT use among their youngest populations. In the group of non-high risk countries it is far more difficult to explain the variations within the model of traditional divides. Apart from Belgium, Austria, and Denmark, which share some political, cultural, economic, and social characteristics, the other countries are grouped in less expected ways. Our findings seem to endorse the multilayered approach of multi-stakeholder governance or network governance model, which stresses the co- and interacting responsibility in securing children's online safety both on the level of contact and content. Overall, the situation in many European countries shows that government initiatives are not sufficient. A robust legal framework does not automatically guarantee a low degree of online risk. Especially in those countries where children are making use of or accessing the Internet in a very advanced way, as is the case in the UK, Netherlands, Norway, Estonia, and Slovenia, the efforts that governments put in their legal framework do not keep up with the rapid pace of young people's Internet use. We also learned that even when the government is taking initiatives in different spheres of action (education, awareness campaigns, legal framework), the lack of provision of online content that meets children's needs and interests appears to have increased the risk encountered, whereas high provision has reduced it. This finding suggests that in countries where children are eager to go online, but are unable to find content tailored to their competences and interests, children run more risk to bump into content that is irrelevant or inappropriate.

Faced with the cross-national differences in categorising, researching and reporting children's risk experiences, this QCA reveals a need for a clearer definition of the stages and facets of risk experiences in terms of actual practices, perception and awareness. Probing the effect of more structural factors related to governmental and industrial spheres of action, this QCA did not examine the mediating role parents can play (as being explicitly promoted by the European Commission). However, we believe that if the Internet safety of children is also a matter of agency at the micro level, then there must be a structural framework that gives individual agents the opportunity to act and opt for a safer Internet. It seems that such an enabling structural framework is more successful, as already pointed out by Oswell (2008), when built on the co-operation of different regulatory agencies: government, industry, education, parents and, last but not least, children themselves.

NOTES

1. Based on expert estimations, the World Economic Forum has developed the NRI, which compares the success of governments all over the world in promoting ICT (Hasebrink et al., 2009).
2. The QCA procedure usually consists of five stages. (1) Having determined the phenomenon that is assumed to be shaped by the interaction of multiple conditions (the so-called outcome variable), the presence or absence of the phenomenon is assessed for all cases included in the analysis. (2) All factors (conditions) believed to shape the outcome variable are identified. (3) Both the factors and the outcome variable are dichotomised. (4) A so-called truth table is constructed, which displays the list of all possible combinations of conditions (with 0 or 1 values) and a particular outcome

(with 0 or 1 value) for each observed case. (5) These combinations are systematically compared with each other (long formulas) and logically simplified (minimal formulas). This process is called Boolean minimisation and it allows one to identify (causal) regularities that are parsimonious, i.e., that can be expressed with the fewest possible conditions within the whole set of conditions that are considered in the analysis (Rihoux & Lobe, 2009). In sum, QCA clarifies patterns of similarity and difference with a minimum of explanatory factors to discover the simplest patterns in the configuration of conditions that lead to a positive or negative result in the outcome variable. Once an optimal minimal formula (without contradictions and with the most parsimonious explanation) is obtained, interpretations can be made. Hence, QCA allows identifying the core conditions that shape the particular phenomenon under study. At the same time, in this last stage, similarities and differences between the cases are understood by returning to the specificities of the cases themselves. For more technical details, see Rihoux and De Meur (2008).

3. Only one country, Iceland, was omitted due to lack of evidence on a number of QCA variables.
4. Source: Eurobarometer 64.4 – Special No. 250: safer Internet, December 2005. Estimates for Iceland 2005 are based on SAFT parent survey in 2003 and 2007. Estimates for Norway 2005 are based on SAFT parent survey 2005.
5. Each time before starting the analysis, whether or not logical cases will be included in the analysis has to be determined. Logical cases are cases which have not been observed in the data but exist logically and can be included in a Boolean minimisation to obtain the shortest solution possible in order to achieve the maximum level of parsimony (Rihoux, 2006). If a researcher chooses to include the logical cases, the software will attribute a 0 or 1 outcome value to some of these cases by making so-called simplifying assumptions about non-observed cases. In practical terms, the software will only select some non-observed cases, that is, only those that allow reaching a shorter, more parsimonious minimal formula. One can obtain four formulas; two for outcome 1, respectively with or without logical cases and two for outcome 0, respectively again with or without logical cases. In the present analysis, we first obtained the formula for outcome 1 without logical cases (no R as in TOSMANA, logical cases are referred to as remainders) to enable us to have a more structured look at the cases and to explain all the causal paths. Furthermore, we obtained the outcome 1 formula including logical cases (with R) in order to minimise the complexity and to open new possibilities for interpretations. Further, we conducted an analysis for the 0 outcome with logical cases to check the consistency of the 1 outcome results.
6. Two minimal formulas were obtained for explained a high degree of online risk but after a close dialogue with each case, we chose the displayed one.
7. Again, the software produced three different solutions of possible combinations of conditions and we decided to explain each case based on our knowledge of the countries.

REFERENCES

- Akdeniz, Y. (2001). Internet content regulation: UK Government and the control of Internet content. *Computer Law & Security Report*, 17(5), 303–317.
- Bauwens, J., Pauwels, C., Lobet-Maris, C., Poulet, Y., & Walrave, M. (2008). *Cyberteens, cyberrisks, cybertools. Tieners en ICT, risico's en opportuniteiten [Cyberteens, cyberrisks, cybertools. Teenagers and ICT, risks and opportunities]*. Brussels: Federal Scientific Policy.

- Browne, C., & Geiger, T. (2007). The executive opinion survey: The voice of the business community. In *The global competitiveness report 2007–2008* (pp. 85–95). Hampshire: Palgrave Macmillan.
- Buckingham, D. (2006). Is there a Digital Generation. In D. Buckingham & R. Willett (Eds.), *Digital Generations: Children, young people and new media* (pp. 1–18). New Jersey: Lawrence Erlbaum Associates.
- Byron, T. (2008). *Safer children in a digital world*. London: Department for Children, Schools and Families.
- Capello, R., & Spairani, A. (2008). Ex-ante evaluation of European ICT policies: Efficiency vs. cohesion scenarios. *International Journal of Public Policy*, 3(3–4), 261–280.
- Collins, R. (2006). Internet governance in the UK. *Media Culture and Society*, 28(3), 337–358.
- Collins, R. (2008). Hierarchy to homeostasis? Hierarchy, markets and networks in UK media and communications governance. *Media Culture and Society*, 30(3), 295–318.
- Dutton, W. H., & Peltu, M. (2007). The emerging Internet governance mosaic: connecting the pieces. *Information Polity: The International Journal of Government & Democracy in the Information Age*, 12(1–2), 63–81.
- Eurobarometer (2007). *Safer Internet for children. Eurobarometer qualitative study in 29 European countries, Summary Report, May 2007*. Optem, France. Retrieved April 22, 2009, from http://ec.europa.eu/information_society/activities/sip/docs/eurobarometer/qualitative_study_2007/summary_report_en.pdf.
- Eurobarometer (2008). *Towards a safer use of the Internet for children in the EU—a parents' perspective. Flash Eurobarometer #248: Analytical report, December 2008, The Gallup Organization, Hungary*. Retrieved April 22, 2009, from http://ec.europa.eu/public_pinion/flash/fl_248_en.pdf.
- Hasebrink, U., Livingstone, S., Haddon, L., & Olafsson, K. (2009). *Comparing children's online opportunities and risks across Europe: Cross-national comparisons for EU Kids Online*. (2nd ed.). London: EU Kids Online.
- Hemmati, M., Dodds, F., Enayati, J., & McHarry, J. (2002). *Multistakeholder processes for governance and sustainability*. London: Earthscan Publications Ltd.
- Holloway, S., & Valentine, G. (2003). *Cyberkids: Children in the information age*. London: Routledge.
- Lievens, E. (2007). Protecting children in the new media environment: Rising to the regulatory challenge? *Telematics and Informatics*, 24(4), 315–330.
- Livingstone, S. (2008). Taking risky opportunities in youthful content creation: teenagers' use of social networking sites for intimacy, privacy and self-expression. *New Media and Society*, 10(3), 393–411.
- Livingstone, S., & Bober, M. (2006). Regulating the Internet at home: Contrasting the perspectives of children and parents. In D. Buckingham & R. Willett (Eds.), *Digital Generations: Children, young people and new media* (pp. 93–113). New Jersey: Lawrence Erlbaum Associates.
- Livingstone, S., & Haddon, L. (2008). Risky experiences for children online: Charting European research on children and the internet. *Children & Society*, 22, 314–323.
- Loveless, A. M. (2002). *Literature review in creativity, new technologies and learning* (Report 4 Futurlab Series). Bristol: Futurelab.
- Malcolm, J. (2008). *Multi-stakeholder governance and the Internet Governance Forum*. Wembley: Terminus Press.
- Marsden, C. T. (2005). Information society—Co-regulation in European media and internet sectors. *Intermedia*, 33(2), 28–35.

- Marsden, C. T. (2008). Beyond Europe: The Internet, regulation and multistakeholders governance—Representing the consumers interest? *Journal of Consumer Policy*, 31, 115–132.
- Oswell, D. (1999). The dark side of Cyberspace: Internet content regulation and child protection. *Convergence: The Journal of Research into New Media Technologies*, 5(4), 42–62.
- Oswell, D. (2008). Media and communications regulation and child protection: An overview of the field. In K. Drotner & S. Livingstone (Eds.), *The international handbook of children, media and culture* (pp. 475–492). London: Sage.
- Rihoux, B. (2006). Qualitative Comparative Analysis and related systematic comparative methods: Recent advances and remaining challenges for social science research. *International Sociology*, 21(5), 679–706.
- Rihoux, B., & De Meur, G. (2008). Crisp-Set Qualitative Comparative Analysis (csQCA). In B. Rihoux & C. C. Ragin (Eds.), *Configurational comparative methods: Qualitative Comparative Analysis (QCA) and related techniques* (pp. 33–67). Thousand Oaks and London: Sage.
- Rihoux, B., & Lobe, B. (2009). The case for QCA: The case for Qualitative Comparative Analysis (QCA): Adding leverage for Thick Cross-Case Comparison. In C. Ragin & D. Byrne (Eds.), *Handbook of case-based methods* (pp. 222–242). Thousand Oaks and London: Sage.
- SAFT (2006). *Parent and children survey. 2004–2006: Norwegian action plan for children, youth and the Internet and the European Commission Safer Internet Action Plan*. Oslo: Norwegian Media Authority.
- Tsaliki, L., & Chronaki, D. (2008, 29-30 September). *Villains, victims and heroes: The representation of pornography in contemporary Greek press*. Paper presented at the “Globalisation Media and Adult/Sexual Content: Challenges to Regulation and Research—Athens 2008” conference, Athens. Retrieved April 22, 2009, from <http://sgsei.wordpress.com/>.
- Wells, M., & Mitchell, K. J. (2008). How do high-risk youth use the Internet? Characteristics and implications for prevention. *Child Maltreatment*, 13(3), 227–234.
- World Economic Forum. (2007). *Executive Opinion Survey 2006–2007*. Geneva: World Economic Forum.

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