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CHILDREN AND E-SOCIETY: IDENTIFYING BARRIERS TO PARTICIPATION[1]

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ABSTRACT

Children are widely seen as direct beneficiaries and indeed often as the primary targets of information society policies, particularly those geared towards enhancing learning opportunities, access to information and building inclusiveness and participation in society. The European Union's *Digital Agenda* places a safer and better internet for children at the heart of its policy platform. And yet, more often than not, children's e-society participation has been a cause of concern and anxiety for policy makers, particularly with ever-increasing early adoption of new internet technologies and services by children and young people. Such concerns have been motivated by the responsibilities held by public agencies to ensure adequate protection for young people whilst seeking to encourage and foster children's online opportunities. Thus, e-society may be said to constitute a set of tricky policy dilemmas and challenges with regard to children's participation. To date, the balancing of risks and opportunities has been informed more by assumptions of the benefits and the dangers that e-society might pose for children and young people. *EU Kids Online*, a pan-European survey of children's use of the internet, has attempted to fill this research gap by providing the first fully comparable data on issues of risk and safety gathered directly from children themselves in 25 European countries. Drawing on its research findings, this paper will focus on the extent of children's embeddedness within e-society, examining dimensions of e-literacy, the availability of appropriate e-content and resilience in relation to risks encountered online. The paper argues for greater policy and research attention to children's perspectives on e-society, as a means of fostering greater trust and participation for society as a whole.

1. INTRODUCTION

Participation in policy making, public debate and all the aspects of decision-making that affects citizens' lives is a goal eagerly pursued by governments and civil society alike. Harnessing the potential of Information and Communication Technologies (ICTs) to make the process of government more accessible and accountable to its citizens is a major policy objective of the European Union and national governments alike (Commission of the European Communities, 2009). E-society, encompassing the full spectrum of society's information and services, offers a vision of how citizens' lives may be enhanced through the application of ICTs. Children feature prominently in this policy framework though often in incomplete and sometimes inconsistent ways. Yet, the figure of the 'digital native' (Prensky, 2001) and allied concepts, offer a powerful image of how tomorrow's adult citizens will benefit from immeasurably improved processes of government, decision making and support for community needs (Tapscott, 1999, Rheingold, 2002, Calvert, 1999).

This paper looks at children's relationship to e-society by examining the evidence about how they access, use and engage with opportunities online. Children are the subjects of many policies in relation to information society issues and as the adopters of new technologies are often seen in the vanguard of new modes of learning, engagement and participation in e-society (Rice, 2006). Yet, their participation is also

sometimes the subject of public anxiety and societal concerns about the implications of unrestricted access to information and services that were not necessarily designed for them (Livingstone, 2003). As such, considering the role of children in e-society is part of a broader policy mix of building trust in the information society, on the basis that how children's opportunities are supported can be seen as a touchstone of e-society for all.

To date, children's engagement with the information society has more often than not been the subject of idealized discourse but with relatively patchy empirical knowledge of how much young people do, or do not, participate in the online world. Arguably, the policy priority, particularly in the first decade of the internet's existence, has been to enhance children's access and to avoid the dangers of a digital divide (Becker, 2000, Bolt, 2000). Now, with growing awareness of the complexity of digital inclusion (Livingstone and Helsper, 2007) and a better evidence base concerning children's use of internet technologies, there is greater appreciation of the need for evidence and ongoing research to support the potential that ICTs offer children. In this context, findings from the EU Kids Online project, the thematic network funded under the Safer Internet Programme, provides valuable baseline data about how children access and use the myriad opportunities available to them. Such evidence is needed in the first instance to inform policy-making regarding the safety of young people's experiences of the internet. But it is also about guiding future policy actions in order to support better online experiences. Therefore, the paper addresses policy recommendations arising from the research which both seek to address the gaps in current policy provision and which seek to foster enhanced participation.

2. ENHANCING THE KNOWLEDGE BASE

The Safer Internet Programme (SIP) is part of larger set of measures under DG Information Society and Media designed to ensure Europe is a competitive knowledge economy and harnesses the benefits of ICT for all its citizens. Alongside early efforts to liberalise the market for technology and audio-visual services, measures to protect minors and combat the downsides of the internet were a prominent feature of the European audio-visual space. Arising from an EC Action Plan on promoting safer use of the internet in 1999 (European Commission, 1999), the programme has in successive phases promoted effective action against illegal content on the internet, and initiatives designed to minimize potentially harmful, though not necessarily illegal uses and content (European Commission, 2003). Pre-eminent in this policy framework has been an emphasis on protection with a set of designated responsibilities on multiple stakeholders – industry, educators, civil society, regulators – to promote and protect children's interests (European Commission, 2006). Notably lacking in its early years was any commitment to research or knowledge enhancement of children's interests or perspectives.

EU Kids Online has sought to fill this research gap. Drawing initially on a database of some 400 studies detailing different aspects of the uses, activities, risks and opportunities for young people, EU Kids Online has classified risks documented in the literature (Livingstone and Haddon, 2009) and distinguished between *content*, *contact* and *conduct* risks, recognising children as actors and participants as well as consumers of content, in need of protection.

In the second phase of the project (2009-11), EU Kids Online conducted a unique, face-to-face survey in homes of 9-16 year old internet users, with their parents from 25 countries across Europe. A total of 25,142 children and their parents were interviewed during 2010. The purpose of the survey was to provide a rigorous evidence base to support stakeholders in their efforts to maximise online opportunities while minimising the risk of harm associated with internet use.

The focus of the research was on specific risks identified in the literature and followed a path through the context of uses and activities online through risks encountered, focusing ultimately on the outcomes for children, particularly those who are adversely affected or harmed. In so doing, however, the survey provides a unique perspective on how children across Europe are participating in online activities, what opportunities are they pursuing and what challenges they face in their day to day use of internet technologies and ICTs.

3.   BALANCING RISKS AND OPPORTUNITIES

As a pioneer in promoting safer internet policies from the mid 1990s on, the European Commission has attempted to balance the conditions for a free single market for audiovisual services and products with the promotion of safety awareness, codes of practice, guidelines and measures to protect minors in the information age (Charlesworth, 2000, Tambini et al., 2008).

E-inclusion policies in Europe, from the Bangemann report onwards, including successive policy frameworks such as the i2010 initiative to the current *Digital Agenda* (European Commission, 2010), have framed the European Union's commitment to an information society for all. Fundamentally, this represents the longstanding commitment that Europe has made towards global leadership in ICT through massive investment in research as well as pioneering and implementing e-government services and applications for all citizens. Alongside this, a host of legislative and regulatory measures exist beginning with the 1996 Green Paper on the protection of minors and human dignity (European Commission, 1996a) followed by a Communication on illegal and harmful content on the internet (European Commission, 1996b), and recommendations on the protection of minors (1996 and 2006) and the implementation of its multi-annual action plan on promoting safer use of the internet (European Commission, 1999, European Commission, 2004). This wide ranging array of regulatory and policy formulation provides the underlying infrastructure across the European Union, codifying the principal instruments upon which digital safety and online child protection is promoted. The core pillars of this approach include self- and co-regulation, filtering and content classification, hotlines to report illegal content and awareness-raising strategies and education about internet safety.   Beginning with priority actions dedicated to countering illegal online content, successive developments have seen greater attention focused on shared responsibility between stakeholders, on promoting greater awareness of security and safety issues, educating users to improve their skills and enhance their capacity to assume responsibility for this own safety.

Beyond Europe, this agenda has assumed a prominent role in discussions on current and future internet regulation. For example, the Council of Europe has promoted the public service value of the internet and the need to empower and support users online (Council of Europe, 2006). A Council of Europe study in 2006 did much to highlight the range of risks and harm online, reinforcing the need for balanced and proportionate policy responses (O'Connell and Bryce, 2006). Likewise, the International Telecommunications Union (ITU) as the sponsor of the World Summit on the Information Society Initiative, has developed a global child online protection initiative seeking to ensure adequate provision in all members states for regulation, awareness-raising and education measures (ITU, 2009). In the same way, a digital safety agenda has featured in successive meetings of the Internet Governance Forum (IGF), been adopted by UNICEF as an important issue particularly within developing countries, and incorporated within broader debates on media and information literacy as promoted through UNESCO (UNESCO, 1999).

What this indicates is that children, perhaps in contrast to other areas of public life, have not been invisible when it comes to e-society. Children are often foremost in policy considerations, just as they are in the vanguard of adoption of new internet services and devices.   What has been notably absent, however, is a robust evidence base upon which to build better policy, inform the fraught nature of the public debate about children on the internet, and to guide the evaluation of measures which are in place.

4.   WHAT THE EVIDENCE IS TELLING US

Data from the EU Kids Online survey, in addition to its focus on risks and safety issues, also provides evidence of the depth of children's embeddedness in the online world (Livingstone et al., 2011). Key findings in relation to access, use and activities, emphasizing opportunities over risks are important indicators of the inclusion as well as gaps to participation in e-society. This is not to underestimate the importance of experiences of risk but to suggest that part of the effort in combatting adverse effects on children is to place greater emphasis on positive opportunities.

4.1 Children's use of the internet

Eurobarometer has estimated that 75% of children in Europe are online. Just three countries (Italy, Greece and Cyprus) were below 50% (Eurobarometer, 2008). In six countries (Finland, Netherlands, Estonia, Denmark, Sweden and the UK), over 90% of children used the internet.

For internet-using children in EU Kids Online, 87% were found to go online at home. While there is growing variation in how children access the internet, it is interesting to note that the home environment remains the most important location for internet use. However, it is clear that there is a growing privatization of online use through the greater prevalence of other connected devices. Importantly, just under half of children (49%) in Europe go online from the privacy of their own bedroom. While age, socio-economic and national variations exist, the fact that such large numbers have more or less privatized access suggests that the traditional advice of keeping the home PC in a public place needs to be augmented.

The internet is also increasingly accessed by some form of mobile device. As children are often early adopters of new technologies, it is unsurprising that mobile use is very, prevalent in some countries. Most children (58%) do still access the internet via a shared personal computer (PC), although access via their own PC is next most common (35%). Mobile access is a growing trend: smart phones are used by 12% on average and 31% go online via their standard mobile phone. Again, age, SES and national variation is much in evidence.

Another indication of the degree of embeddedness in children's lives may be gauged in the frequency and amount of daily use. Going online everyday, it may be assumed, is required for communication activities and maintaining online relationships. In the survey, 57% of children were found to use the internet every day or almost daily and 92% go online at least weekly. In general, children spend 86 minutes online in an average day. SES matters especially for daily use: 64% of children from high SES homes are daily internet users compared to 49% from lower SES homes. Age also matters for daily use: just a third of younger children (9-10 years of age) compared to 77% of 15-16 year olds go online. The age at which children first go online is also declining across Europe. Currently, the average age of first internet use is 9. Yet, children who are in the 15-16 age group say that they were 11 when they first used the internet while 9-10 year olds while 9 to 10 year olds were 7 on first internet use.

4.2 Activities

What do children do online and what activities may be seen as participative or indicative of engagement in e-society? EU Kids Online asked about 17 different kinds of activities ranging from learning, communication, entertainment and creative activities. Of these, use of the internet for schoolwork was found to be highest of all activities. This was followed by entertainment-oriented activities such as watching video clips online and communicating online, reflecting the wide number of social activities that are conducted online. More creative activities such as uploading content, writing a blog or spending time in a virtual world were found to be less frequent.

In all, there is evidence of considerable breadth in children's internet use, with younger children doing on average over five activities and teenagers doing eight or nine activities. As earlier research has suggested, these findings support the 'ladder of opportunities'. This hypothesises that certain basic activities tend be done first, and by most children. However, more creative or participatory activities come later, and are undertaken by fewer children.

Further analysis is now being done on this data to identify underlying factors in the wide range of uses of the internet and to attempt to develop a typology of user types and gain more of an overview of children's online activities.

In order to gain an insight into underlying patterns in such a wide range of activities, classifying activities under the headings of communication activities (using IM, visiting SNS sites, emails and chatrooms), creativity (created characters, posting photos or messages on a website), gaming (playing online games, watching videos online) and learning activities (using the internet for schoolwork, reading watching the news). Following a cluster analysis of underlying trends reveals a number of distinct patterns or user types (Hasebrink et al., 2011).

What this analysis shows is that there is an increasing range of activities, varying in composition and complexity that rises with age and displays an underlying disposition to certain kinds of online activities. This is consistent with the concept of the 'ladder of opportunities' introduced by Livingstone (Livingstone et al., 2005) which argues that children advance through a series of graduated steps starting with the most basic

activities and progressively taking on more skilled, complex and creative opportunities. In a cluster analysis, six groups increasing in age and mix of activities have been identified as follows:

i) **'Low use/learning oriented'**

This group includes many younger children, and averages 11.4 years old. They use the internet rather little, focusing mainly on schoolwork, watching video clips and reading/watching the news. Few have an SNS profile and they do few risky online activities. Although they encounter few online risks, when they do, they tend to be upset.

ii) **'Low use/social networking site oriented'**

Also relatively young (average 11.5 years), this group is less likely to use the internet for schoolwork or news and more likely to use SNS. They also encounter online risks though they tend not to find these upsetting.

iii) **'Moderate use'**

A bit older than the first two groups at 13.1 years on average, these children spend more time online and have a much wider range of activities. They are, too, more likely to encounter online risks.

iv) **'Diverse and risky opportunities'**

Averaging 13.4 years old, these children spend almost two hours a day online and do the widest range of activities, including some more advanced and creative activities on the ladder of opportunities. They also do more risky online activities. Although not the oldest group, they encounter the most risk online but are the least likely to be upset.

v) **'High use/entertainment oriented'**

These children are older (average 14 years) and more often boys. They are online for most minutes per day (201 minutes on average) and do a fairly wide range of activities. They like playing games against the computer and watching video clips, and they do relatively little schoolwork, news or creative activities. Their exposure to risk is quite high, and some use the internet excessively.

vi) **'Focused social web use'**

This is the oldest group (average 14.2 years), with more girls than boys, and they use the internet for longer, doing more activities, than the average. They are unlikely to play games online, but are the most likely to use SNS. They also read/watch news, use instant messaging, post photos or music and write blogs. Their online risk encounters are similar to groups 4 and 5 but they report slightly higher levels of upset.

4.3 Digital skills

The range of activities reported by children, a crucial dimension of participation in e-society, is one indicator of the underlying skills possessed by children. A second way in which this is measured is through self-reporting and in the survey children were asked (11-16 year olds only) how many of 8 digital safety skills they could perform. What the results show is that children could perform on average just 4 of the 8 skills asked about. Teenagers in general are more skilled and notably 11-12 year olds appeared to lack basic skills such as changing privacy settings on a social networking profile, comparing information from different websites, blocking unwanted content or messages or changing filter preferences. Boys claim more skills. Most skills, over four, were reported in countries such as Finland, Sweden, the Netherlands and Estonia. Least skills, less than three, were reported in Hungary, Romania, Italy and Turkey. In addition, 36% (though only 13% 9-10 year olds) say it's very true that "I know a lot more about the internet than my parents"

In terms of the digital literacy and safety skills that children are gaining across Europe, the 'glass half full' approach would emphasise that the majority of 11-16 year olds can manage most of the specific skills we asked about. Moreover, one third are very confident, and a further third are a bit confident that they are the generation that knows a lot about using the internet, especially compared with parents.

However, the 'glass half empty' conclusion is that one third says it is not true for them that they know more than their parents about using the internet. Further, of the eight skills we asked them about, on average they can only do four of them, and more than four in ten do not know how to block messages, bookmark sites, find safety information, change privacy settings or determine whether websites are reliable.

4.4 Perceptions of harm

While activities and skills are measures of how children engage in e-society, these experiences are not all positive. In the research, exposure to risk was a major finding in relation to pre-determined categories as well as overall subjective experiences of harm. In addition to sexual imagery, bullying, sexual messaging and meeting contacts offline first met online, other risks topics included harmful user generated content (such as suicide sites, hate speech and sites promoting anorexia or self-harm). Personal data misuse, though less in evidence, was another feature of online risk which children reported as something which negatively affected them.

Also, it must be remembered that risks and opportunities online go hand in hand. Looking at the incidence of risk mapped against the range of online activities across Europe (Figure 1), a clear relationship emerges between risk and opportunity and that the more children go online, they more they will encounter risks for which they need to be prepared.

There is a fundamental distinction, however, between risk and harm. There is much evidence in the literature to support the view that risk is an essential part of learning and central to building resilience. Some countries have succeeded in promoting online opportunities while not increasing the overall exposure to risk but this is an ongoing challenge faced by all countries.
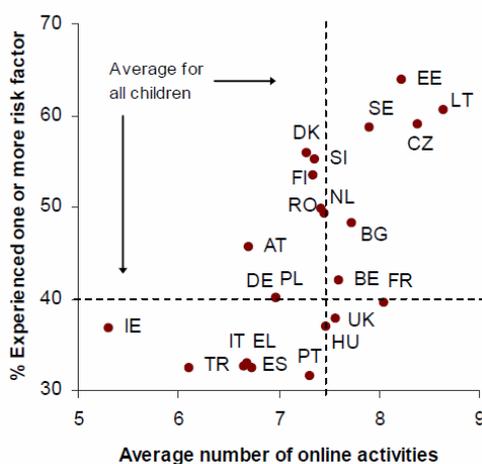

Figure 1. Risks and online opportunities (Livingstone et al 2011)

5. CONCLUSION

A central objective of the EU Kids Online survey is to inform and guide policy making in the area of internet safety. A key emphasis of this policy framework is to create not only a *safer* but also a *better* internet and in this context, its recommendations contribute to promoting children's participation in e-society. The thrust of policy in this field is a shared multi-stakeholder responsibility with implications for a number of policy actors within the overall environment in which children engage in the online world. Here, four main points are presented insofar as they impact on improving the quality of children's online engagement.

Firstly, is the notion of the ladder of opportunities. This is an idealised map of how children can learn and develop in experience of the online world through graduated steps of increasing complexity.

- The first step – common to all children - is when children first go online and use the internet for schoolwork and playing games alone against the computer.
- The second step which in addition to schoolwork and games, adds watching video clips online (e.g. YouTube). These are all ways of using the internet as a mass medium – for information and entertainment. Notably, a third of children in some countries (Ireland, Austria, Greece, and Turkey) do just these activities.

- The third step involves using the internet interactively for communication (social networking, instant messaging, email) and reading/watching the news. Half of children in Ireland, Austria, Germany, Greece, Italy, Poland and Turkey only reach this step.
- The fourth step includes playing with others online, downloading films and music and sharing content peer-to-peer (e.g. via webcam or message boards). Children in Sweden, Lithuania, Cyprus, Belgium and Norway are most likely to reach this step.
- Only a quarter of children reach the fifth, most advanced and creative step. This involves visiting chatrooms, file-sharing, blogging and spending time in a virtual world.

With one third of children confine themselves to the top three, most basic activities. Here, there is a clear case where children do 'progress' very far up the ladder of opportunities for educational and digital literacy initiatives should be prioritized.

Secondly, in response to the overall perception of the quality of online content, and particularly in the case of younger users who were the least satisfied with the available online provision, it is important to develop new resources, new content targeted to their needs. This is a finding that the European Commission has already taken up with the establishment this year of a "European Award for Best Children's Online Content" as well production guidelines for websites and online content for younger users. This is a valuable step, but high profile national initiatives supported by the large media producers and broadcasters, who are often host the most popular content, should also be promoted. More generally, the needs of younger users need to be taken into account. As more and more children go online at ever-younger ages, rethinking the nature of content provision and support for participation needs to be undertaken highlighting the possibilities for advancing children's learning and engagement as young citizens.

Thirdly, a key dimension that emerges in the data is that socio-economic divides remain a persistent barrier in terms of promoting equality of inclusion in e-society. While digital divides do not necessarily appear across 'digital-haves' and 'digital-have nots', there are significant differences in the quality and degree of access enjoyed by different groups in different countries. The persistent issues of digital divides, and socio-economic factors in determining inequalities of access and opportunity need to be addressed. For children who lack convenient broadband access, governments should ensure that digital exclusion does not compound social exclusion. It is important that while all should benefit from public information resources, special efforts are made to ensure these reach the disadvantaged or information-poor.

Finally, perhaps the most important major gap in current approaches to the digital landscape for children is any provision for fostering digital citizenship. Given the rapidly changing nature of the technologies involved, the emerging applications which pose new challenges of their own, and that direct parental supervision is much less relevant to children's online usage, the only sensible priority is to encourage children to be responsible for their own behaviour and safety as much as possible The number one recommendation therefore has to be: *A focus on empowerment rather than restriction* of children's usage, emphasising responsible behaviour and digital citizenship, treating children as a competent, participatory group encouraging self-governing behaviour. Children, young people and their parents, in other words, should not always be seen as the target of awareness-raising but also as active agents with a central role in promoting and supporting safer internet practices.

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