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19 Conclusion

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Researching children and young people online

After the first decade or so of research, what do we now know about children and young people online? The number and range of empirical studies of children and the internet has increased steadily over recent years, although many studies are largely descriptive – charting statistics on access, use and activities online. One theoretically informed strand of research draws on the tradition of studying children and television, extending knowledge of children's engagement with a dominant, usually national mass medium to their activities in the globalised digital age. Another strand of research seeks to position the internet within the wider context of children's lives, as long analysed by theorists of childhood, youth and the family. Others draw on particular specialisms as appropriate to the research focus – framing research in terms of theories of formal and informal learning, or information systems and digital literacies, or child welfare and protection. Ideally, these multiple theories and perspectives would complement each other, combining to generate a multidimensional account of children's relation to online technologies. In practice, research is characterised by a diversity of assumptions and insights that may or may not intersect constructively, resulting in some lively debates in this newly established field. But it can no longer be said that little is known, as was the case just a few years ago (Livingstone, 2003).

Yet it seems that the more we know, the more we know we do not know, especially for so fast-moving a target as 'the internet'. In particular, most research addresses the 'fixed internet', although in many countries, children already go online via other platforms such as their mobile phone, games machines or other

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devices, raising new questions of autonomy, privacy and risk (Ito et al, 2008; Ling and Haddon, 2008). And most research concerns what in retrospect we can call 'Web 1.0' – searching for and visiting websites, rather than creating information or engaging with the range of diverse applications emerging under the umbrella label 'Web.2.0'. More positively, research on creating content (Chapter Six, this volume), social networking (Chapter Seven) and new forms of learning (Chapter Seventeen), as well as children's problematic activities online (Chapter Twelve), begins to scope a promising research agenda. As Verónica Donoso, Kjartan Ólafsson and Thorbjörn Broddason comment (Chapter Two), although researchers always believe 'more research is needed', in this field such a conclusion is unavoidable; having up-to-date and relevant findings is especially important when, as in this volume, the evidence base is mined to guide policy developments (see Section IV).

Research methodology regarding the study of children online has advanced considerably in recent years, with emerging good practice in conducting research with children, especially in relation to the online environment (Chapter Three), and especially across cultures, putting countries into a comparative framework (Chapter Four). Particularly, research on children has often wrong-footed researchers by forcing them to recognise that their very adult status risks evoking social desirability biases from young interviewees, that adult implicit assumptions and inappropriate wordings risk misunderstanding what children have to say, and that some of children's lives is quite simply inaccessible to an adult gaze. Added to this is the ethical challenges of asking children about such potentially upsetting topics as bullying or sexual harassment and, furthermore, about such fast-changing phenomena as practices of online communication, especially as these multiply across fixed, mobile and convergent platforms. In response to such challenges, experienced researchers urge working 'with' rather than working 'on' children (Greig and Taylor, 1999), as demonstrated in the EU Kids Online's *Best practice research guide* (Lobe et al, 2008) and in Chapter Three of this volume. Key gaps in the evidence base remain. Most research concentrates on teenagers, leaving a critical evidence gap regarding the many primary school-aged children who are now rapidly going online (Chapter Two). Also, albeit for good methodological and ethical reasons, research on younger children tends to use

qualitative methods or to rely on parents' accounts of children's activity, making it difficult to estimate the frequency of certain practices among younger children or to compare age, gender or other groupings. Meanwhile, since teenagers are mainly surveyed, one problem is findings that tend to lack contextualisation in terms of the experiences and perceptions of young people themselves, as would be revealed by qualitative research. As discussed in Chapter Five, some features of the evidence base are shaped less by theory or methodology than by the particular cultural, political and economic contexts in which researchers work, this influencing the basis on which research is funded and the climate within which evidence is expected to inform policy.

Going online – new opportunities?

As the research reviewed in this volume makes clear, when opportunities permit, children and young people engage enthusiastically with many online activities, including entertainment, learning, participation, creativity, the expression of identity and, especially, communication and social connection. Most commonplace of all is information seeking, this sometimes in support of educational activities but most valued for supporting musical or sporting interests and hobbies, as well as practical tasks such as travel, shopping and local services. Also very common, often practised daily, are the various communication opportunities – social networking, instant messaging, emailing and so forth – that complement face-to-face communication by enabling a welcome measure of control over the management of intimacy in peer networks (Chapter Seven). Least practised are opportunities for civic participation online, despite public policy optimism regarding the internet's potential to overcome so-called youthful political apathy. Also, perhaps more surprisingly, it seems that the many opportunities to create and promote one's own webpages, blogs, artwork, stories or music are not taken up by a large proportion of young people (Chapter Six). To understand the differential adoption of online activities, several contributors to Section II invoke Livingstone and Helsper's (2007) 'ladder of opportunities' which, echoing citizenship studies' 'ladder of participation', outlines four steps. For new users, the first step is generally information seeking, whether for leisure and school. Most children go beyond this, becoming 'moderate users' by adding in email and games. While many younger children stay at this step, frequent users

and also older children take the third step to become 'broad users' by expanding their peer-to-peer engagement (for example, through music or film downloading and instant messaging). Last, it is mainly the daily users, mostly teenagers, who become 'all rounders' by adding such interactive, creative or civic activities as creating sites, images or stories for others, contributing to message boards, doing quizzes, voting or signing petitions. Two implications follow. First, the simple fact of using the internet may not mean that a child achieves their potential or gets the most from it, and further support and encouragement to progress or expand their activities may be required. Second, the fact that a child plays games online may not be, as worried adults are tempted to judge, a 'waste of time', for this may represent a step towards further activities, one that is fun, gives confidence and develops skills (Jenkins, 2006; Ito et al, 2008).

The more complex and exciting online opportunities become, the more it seems that the vision of all children as 'digital natives' or 'cyber-experts' must be qualified. Empirical research reveals considerable differentiation within the category 'children and young people', partly because not all children choose to engage with the internet in a highly sophisticated manner. As discussed in Chapter Six, children vary in their interests, being skilled and motivated agents who make thoughtful decisions about what they consider the internet can offer them. On the other hand, children are also constrained in their online activities by some familiar structural factors shaping their offline lives, and this may account for why several chapters in Section II are a little downbeat. Indeed, despite a decade of public and private sector investment to get online technologies into homes, schools and communities, the structural constraints in children's lives remain influential, perpetuating long-standing differences and inequalities. As Panayiota Tsatsou, Pille Pruulmann-Vengerfeldt and Maria Francesca Murru state in Chapter Nine, digital divides are hardly the fault of the individual for they result from unequal social and contextual resources shaping children's environments. Yet it is individuals who bear the consequences – hence the widespread support for media literacy (Chapter Eighteen).

In recent years, the analysis of digital inclusion has shifted from a focus on the simple binary of the haves and have-nots to a more nuanced recognition of the

stratified 'opportunity structures' that enable or inhibit activities online (as, indeed, offline), these placing particular and often unfeasible demands on people's emerging and variable digital literacies (Livingstone, 2009). From the available research across Europe and elsewhere (van Dijk, 2005), divides remain striking both across and within countries. Cross-nationally, it seems that many children, especially those in countries where the internet has only recently become accessible, use the internet in relatively infrequent or restricted ways compared with those in whose country the internet is now thoroughly embedded in domestic, school and community settings. Within countries, persistent socio-economic differences, long correlated with educational, regional and other sources of inequality, enable children from middle-class families to take up more opportunities online than children from lower-class families, even once basic access has become available to all.

The end of digital inequalities, should this be feasible, need not mean homogeneity, for one hardly expects all children and young people to use the internet in the same way. Helen McQuillan and Leen d'Haenens (Chapter Eight) consider whether observed differences really matter – do they reflect inequalities of opportunity or merely different preferences (see also Peter and Valkenburg, 2006)? Age differences in online activities and, therefore, in literacies and opportunities, are obviously to be expected as young children develop into older teenagers, as explained by cognitive and sociological theories of child socialisation. But, while age differences do not seem to reflect either inequalities or differences in preference, gender differences pose a contrasting case. When computers were first introduced some years ago, research found girls to be systematically disadvantaged in access, time spent, technical knowledge, teacher and parent support and, not surprisingly in those circumstances, motivation and self-confidence (Bird and Jorgenson, 2003). Today, access to the internet is, in most countries, already more or less equivalent for girls and boys at home and school, although small differences persist. Beyond this, there are differences in use, which may simply reflect divergent gender preferences, and in confidence or self-perceived skills – arguably a case of inequality. Possibly, boys' preference for playing games and girls' preference for expressive and communicative activities

will advantage boys in the future, but the reverse may instead be the case; it is not yet clear which online skills will be of benefit in the adult labour market.

Going online – new risks?

If educators, parents, policy makers and industry are to encourage a wider and deeper engagement with the internet on the part of children and young people, they must be confident that this is not simultaneously a recipe for harm. From the outset, EU Kids Online has sought to critically evaluate the nature and degree of risk associated with children's internet use, well aware that, as Marika Lüders, Petter Bae Brandtzæg and Elza Dunkels comment (Chapter Ten), risk is simultaneously an objective reality and a social construct. The possibility of genuine harm to a child must be addressed seriously. However, the fear of such harm, especially if amplified by the mass media (Chapter Thirteen), may bring its own problems (Smith and McCloskey, 1998), as may an over-simple labelling of certain groups as 'at risk' (Kelly, 2000). Defining risk as 'the possibility that human actions or natural events lead to consequences that affect aspects of what humans value', Klinke and Renn (2001: 159) usefully distinguish risk assessment (the calculation of risk probability and magnitude), risk evaluation (determining the acceptability of a given risk) and risk management (the process of reducing risks to a level deemed tolerable by society). In effect, the EU Kids Online Network sought to undertake a risk assessment for children's use of online technologies (Hasebrink et al, 2009). Putting together the findings reviewed in Section III of this volume, the following picture emerges regarding children's online risk experiences in Europe (see ISTTF, 2008, for a comparable US review).

First, it appears that the rank ordering of risks is fairly similar across countries, notwithstanding limitations on the quality, scope and comparability of the available evidence base (see Hasebrink et al, 2009) and the fact that several risks are yet to be researched comparatively, such as 'race' hate, commercial exploitation and self-harm (although see Chapter Eleven). Giving out personal information is the most common risk (approximately half of online teenagers), although perhaps it is better treated as a condition that enables risk rather than risky in and of itself. Immediately, the complexity of risk becomes apparent for, as Marika Lüders et al (Chapter Ten) point out, the simple advice not to give out

personal information online makes little sense for children using social networking sites or similar, precisely because these are based on the use of real names and other personal details. More significantly, communicating anonymously may be no less risky because it 'deindividuates' participants, removing conventional constraints on communication and thus potentially even increasing risk.

Seeing pornography online is the second most common risk for around four in ten teenagers across Europe, although ambivalence over the potential harm involved is higher than for the other risks. Seeing violent or hateful content is the third most common risk, experienced by approximately one third of teenagers and being bullied or harassed is fourth, affecting some one in five or six teenagers online. Receiving unwanted sexual comments is experienced by between one in ten teenagers (Germany, Ireland and Portugal) but closer to one in three or four teenagers in Iceland, Norway, the UK and Sweden, rising to one in two in Poland. Last, meeting an online contact offline appears the least common although arguably the most dangerous risk, showing considerable consistency in the figures across Europe at around 9% (one in eleven) online teenagers going to such meetings, although this rises to one in five in Poland, Sweden and the Czech Republic.

Qualifying this overall picture, the heterogeneity of 'children and young people' must be recognised. Although, unfortunately, little is known regarding young children and online risk, it is clear that gender and socio-economic status (SES) differentiate among children's risk experiences. Thus, in most countries, it seems that children from lower-class families are more exposed to risk (see Chapter Eleven), suggesting that safety awareness programmes and media literacy interventions could usefully target less privileged families, schools and neighbourhoods. Further, there are also gender differences in risk, mainly the unintended consequences of the choices that girls and boys make regarding preferred online activities. Boys seek out pornographic or violent content more and are more likely to meet somebody offline that they have met online and to give out personal information, while girls are more upset by violent and pornographic content, are more likely to chat online with strangers, receive

unwanted sexual comments and are asked for personal information; both appear at risk of online harassment and bullying.

While the above applies, more or less, across Europe and beyond, EU Kids Online also compared national findings so as to recognise cross-national differences in, particularly, the extent to which children use the internet in each country (EC, 2008) and the level of online risk faced by children (as reviewed by the network). The resulting classification (see Table 19.1) suggests a positive correlation between use and risk. High-use, high-risk countries are, it seems, either wealthy Northern European countries or new entrants to the European Union (EU). Southern European countries tend to be relatively lower in risk, partly because they provide fewer opportunities for use. Further, high use of the internet is rarely if ever associated with low risk, thus setting a challenge for public policy ambitions of maximising opportunities while minimising risks. Average use may, it seems, be associated with high risk, suggesting particular problems in some new entrant (Eastern European) countries where the regulatory infrastructure and safety awareness are under-developed. More promisingly for public policy, high use may also be associated with only average risk, notably in some Nordic countries where both regulation and awareness are most developed.

Table 19.1

Online risk	Children's internet use		
	Below EU average (< 65%)	*Average (65%-85%)*	*Above EU average (> 85%)*
Low	Cyprus Italy	France Germany	
Medium	Greece	Austria Belgium Ireland Portugal Spain	Denmark Sweden
High		Bulgaria Czech Republic	Estonia Iceland

			Netherlands
			Norway
			Poland
			Slovenia
			UK

Source: Hasebrink et al. (2009)

There are clearly many possible factors that may account for cross-national differences in Table 19.1, each affording different possibilities for intervention and so with particular implications for policy (see Chapter Fourteen; and as discussed in Hasebrink et al, 2009). But it is hard to take the present analysis much further when risk assessment in this domain is hampered by lack of sufficient robust and directly comparable evidence, making the findings summarised here tentative rather than definitive.

However, the next steps in risk analysis – of risk evaluation and risk management – are even more contentious. Risk evaluation raises a particularly difficult question, for in popular and, especially, media discourses, it often seems that no risk to a child is acceptable. But, on the other hand, there is also growing recognition that a risk-free environment, even if feasible, would deny children the chance to learn to manage risk through experience. Thus it would carry unacceptable costs to children (by overly restricting their opportunities) as well as to adults (by overburdening parents, curtailing legitimate adult freedoms and increasing the regulation of firms). In seeking a balance between children's rights to online opportunities and the need to protect them from online risk, it must also be acknowledged that evidence of risk is not, in and of itself, direct evidence of actual harm. Research does show in several countries that some one in five online teenagers report a degree of distress or of having felt threatened, and research from clinicians, medics and law enforcement all suggest such harms to be real, at least for a minority of children (Finkelhor, 2008; Quayle et al, 2008; Livingstone and Millwood Hargrave, 2009). But a sound picture of the extent, distribution and consequences of risky experiences online remains elusive. When it comes to risk management, then, one must build policy on a somewhat unsteady foundation.

Policy implications

A parallel analysis in which online opportunities for children are also assessed, evaluated and managed has not been attempted here because the research literature provides separate reviews and recommendations associated with, say, online education, participation or communication but offers little by way of an overall picture. This is partly because common measures of online activities have not been developed as they have for online risks. It is also because the 'opportunities agenda' is still largely preoccupied with the prerequisites of digital literacy and digital inclusion. However, as we have stressed throughout this volume, neither children's experiences online nor the mediated environment more broadly permits a neat dividing line between risks and opportunities. This is for several important reasons, the first of which is the psychological imperative noted already, namely, that children and teenagers in particular must push against boundaries to discover their strengths and learn what they can and cannot cope with. In this sense, risks are, truly, opportunities for learning.

Another is a matter of definition: as noted in Chapter One, children perceive as opportunities some activities that adults perceive as risks (making new friends, sharing intimacy, disclosing personal information, downloading music, giving sexual or health advice and so forth). This in and of itself occasions misunderstanding within families and poses difficulties for framing sensible safety guidance. These difficulties are in turn compounded by poor specifications of the severity of risk: when does teasing become bullying, or self-posing become pornography, or the 'friend of a friend' become a 'stranger'? Yet another reason points to matters of design. Search engines, for example, do not generally distinguish sexual advice from pornography and a search for 'teenage sex' will produce both. The same applies to 'drugs' and 'anorexia', although the corporate social responsibility departments of major search companies are making some improvements in this respect. Into this design category one might also put such 'unthinking' practices as reputable sites requesting personal information (Children's BBC is a case in point) in so far as this then 'teaches' children that one can disregard adult advice 'never to give out your name online'.

It is hardly surprising, then, that empirical research shows children's experiences of opportunities and risks to be positively correlated (Livingstone and Helsper, in press. Without a subtle awareness of these interrelations, policies designed to minimise risk may impact unduly on opportunities, and policies designed to enhance opportunities may, inadvertently, carry consequences for risks. Achieving an acceptable balance is a daunting but important task. This volume has, in essence, identified two ways ahead. The first is to survey the array of policy tools available to various stakeholders in order to identify whether evidence supports particular initiatives or directions. Elisabeth Staksrud's call for policy makers to rethink their positioning of children solely as victims of risk, or Marika Lüders et al's challenge to popular advice to stay anonymous online, represent examples of this approach, as reviewed by Jos de Haan (Chapter Fifteen). The second, less common, way ahead examines the predictive value of competing explanations for online risk in order to prioritise some initiatives over others. This approach, in effect, examines where online risks or, perhaps, online opportunities, are greater so as to determine which factors make the difference. In the case of Chapter Fourteen, for example, the purpose was to compare high and low-risk countries to identify whether and when parental mediation works to reduce children's online risks (see also Chapter Sixteen).

For better or for worse, 'children are growing up in an immersive media culture that has become a constant and pervasive presence in their lives' (Montgomery, 2007: 212). We have given considerable attention to the risks in this volume, for the use of online technologies brings experiences that were once fairly inaccessible within the scope of children's daily experience – more graphic pornographic images than previously accessible, harassment reaching from the school gates into the child's bedroom, specialist knowledge about suicide methods, the celebration of anorexia or 'race' hate, modes of privacy invasion which are hard to detect and many interactions in which trust and authenticity is uncertain and easily manipulated.

But we conclude by also calling for more public debate over the opportunities for children. These are, perhaps surprisingly, often taken for granted rather than specified clearly, and when one or another advocate sets out their vision of

'positive' or 'beneficial' provision for children online, this is readily critiqued as adult-centred, commercially biased or elitist (Livingstone, 2008). Yet the same features of the online environment which exacerbate risk – the ease of creating and manipulating representations, the ready searchability and persistence of images, the speed and reach of interactions, the possibilities for both anonymity and privacy, the provisional and experimental nature of online communication – all this and more is precisely what affords the many opportunities of that same environment (boyd, 2008). Ensuring that these, rather than the risks, feature at the top of the public agenda, truly benefiting children in a host of diverse ways as suits their interests, rights and needs, is surely the central task facing researchers and policy makers in the coming decade.

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