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# Chapter 1

## Theoretical framework for children's internet use

### Sonia Livingstone and Leslie Haddon

#### Introduction

Childhood is rarely viewed neutrally. Although strongly shaped by the past, childhood in the early 21<sup>st</sup> century is very different from the one that adults today remember. Looking into the face of a child seems to enable a 'gaze into the future'. It is no wonder, then, that ideas about childhood, including those expressed in academic contexts, are framed by hopes and anxieties, and by the tension between perceptions of continuity and change. Many features of social, political and economic life have altered, even transformed childhood in recent decades, and each of these changes has been tracked by academic research, influenced by policymaking and reflected upon by the public. However, one recent change has grabbed the headlines, setting the agenda for debate about society's hopes and anxieties as well its many uncertainties regarding the degree and nature of change.

The 'digital revolution' – widespread access to personalised, interactive, convergent, ubiquitous technologies for networking information and communication processes – is accompanied by anxious speculation regarding the so-called digital generation, digital youth, digital natives, digital childhood. Notwithstanding the excessive hyperbole of the media coverage, the sense of being 'on the cusp of a new sociality' (Golding, 2000, p. 166) is palpable. However, much of this speculation is not as naively technologically determinist as it is often made out to be, for it is generally understood that fundamental social, political and economic changes have shaped and made possible the particular 'digital' environment in which children now grow up. Where early commentators appeared to regard technological developments as not only influential but also inevitable, it is now understood that particular economic, political and business processes drive innovation in technology and marketing, and that these processes are in turn subject to influence and intervention. Commenting on global changes in late modernity, Beck (1986/2005, p. 15) observes that 'a new twilight of opportunities and hazards [is coming] into existence – the contours of the risk society.' In the risk society, he argues, we are:

“concerned no longer exclusively with making nature useful, or with releasing mankind from traditional constraints, but also and essentially with problems resulting from techno-economic development itself... Questions of the development and employment of technologies ... are being eclipsed by questions of the political and economic 'management' of the risks of actually or potentially utilized technologies. (p.19)

Moreover, these questions are experienced as pressing at all levels of society – from the state and also the growing array of supra-state organisation, down to the level of individuals. The downside of promoting individual empowerment, rights and autonomy, Beck argues, is that the consequences of making poor choices (often in circumstances of insufficient or misleading information) also fall increasingly on individuals, resulting in a disproportionate burden on those least resourced to cope. The internet, we suggest, represents a prime case in point. It is, crucially, a product of society, invented, shaped, monetised and promoted by major media conglomerates in order to bring a rich information and communication environment to many. But the consequences, albeit often unintended, of its thorough embedding in everyday life pose a source of considerable worry and fear among the many ordinary people who cannot exactly understand it, judge the quality of what it

offers, or anticipate the outcomes of their practices of use. What, then, do we know about the experiences of ordinary families as they embrace the diverse modes of communication and interaction enabled by mass adoption of the internet?

### **This volume**

As signalled by its title, this book examines the fascinating, but often fraught relation between children, risk and the internet. Distinctively, it integrates multidisciplinary approaches to theory with a substantial body of new evidence and a considered effort to draw out nuanced policy implications. These policy implications are nuanced insofar as we are careful to avoid grandly universalistic assumptions about childhood or the digital because cultures and contexts matter, as amply revealed by the evidence base that grounds our work. The implications are nuanced also insofar as we hold that 'safety' is an important, but not predominant concern: we argue that protection must be balanced in crucial ways, against enabling children's rights, pleasures and opportunities, including the opportunities for risk-taking.

Our analysis is based on a unique in-depth survey conducted in 25 countries and complements what has been, until now, a largely body of American work leading worldwide discussions regarding children and online risks.<sup>1</sup> The *EU Kids Online* survey was conducted by a network of over 100 researchers from diverse academic disciplines, with diverse methodological and professional expertise. The members of the network worked together first to scope the contours of the field, its strengths and gaps, and its methodological challenges and policy priorities (Staksrud et al., 2009; Hasebrink et al, 2009; Livingstone and Haddon, 2009), on which basis we designed and conducted a survey of 25,000 children (in 25 countries and as many languages) aged 9–16, who were interviewed at home, face-to-face. The collaborative effort required gives coherence to the project and to this book. However, the network members are not represented by a single voice, and the chapters in this volume testify to the debates over approach and focus that serve to illuminate the analysis of children and youth as they embrace the internet within their everyday lives, to a greater or lesser degree, for better or for worse.

The chapters in the book reveal the similarities and differences in the findings for children, contexts and countries, and in the policy responses; similarities enable the sharing of best practice while differences caution against the wholesale import of solutions from one context to another. We locate our project within three core debates emerging in the digital age (and crystallised in the debate over 'digital natives') regarding childhood, risk (too often framed in terms of moral panics rather than sober analyses of harm) and responsibility (with 'multi-stakeholder' alliances claiming rather more than they deliver) (Chapter 1). Chapter 1 concludes by proposing a working model to integrate theory, findings and policy and, thus, to guide future research.

### **Digital transformations: all change in the lives of children?**

It is important first to clarify the contributors' perspective on the broader discussions surrounding contemporary childhood which form the backdrop to the chapters that follow. Claims about the emergence of 'digital generations' (Buckingham, 2006) or about children being 'digital natives' (Prensky, 2001; cf Helsper and Eynon, 2010) suggest that a revolutionary change of some kind is afoot. Undoubtedly the current generation of children has to deal with – often with relish – 'new'

situations consequent upon technological change. Social networking sites pose new questions about the social norms to be considered in relation to ‘friends’, ‘best friends’ and ‘deletion’ of friends as children learn to manage the amplified social dramas that occur online (boyd and Hargittai, 2010). Learning no longer requires a trip to the library, but rather searching, navigating and evaluating on the internet, skills that are unfamiliar to many parents. Photo albums, birthday wishes, diaries, records of conversations and more are put on line – nothing is lost, though it may be regretted.

Yet, fascinating as networked digital technologies may be, especially as they become ever more convergent, mobile and individualised, a sober assessment of the magnitude, nature and significance of changes in childhood generally points less to technology and more to socio-historical shifts (Livingstone, 2009). In the 1950s, a youth culture emerged out of the coincidence of the smaller nuclear family, the growth of consumer culture, extended years of education and the human rights movement (Coontz, 1997; Cunningham, 2006). The importance of children’s rights, to freedom to play and to explore, and the challenge to adult authority have shaped our present-day understanding of children’s internet use. This sometimes has resulted in an over-celebratory tone, but also has mobilised the societal resources to support children’s educational and participatory prospects in a digital age (Jenkins, 2006).

It seems that some things are, indeed, changing in young people’s styles of learning and acting, and that the ways in which knowledge is represented or how pupils prefer to learn are being reshaped by the affordances of the technologies that they engage with and the pedagogic, commercial and peer cultures that contextualise their daily activities. These and other changes shape the appropriation of new technologies, contextualising their meanings and accounting for much of the diversity in their use. However, it is important to remember that the timescale of these changes is longer and far more variable and uneven than claims of a wholesale transformation might suggest. Moreover, continuities in the experiences of children are easily overlooked. In socialisation processes the roles of parents and teachers, and neighbourhoods, friends and cultural values remain important. Hence, while the digital world may change the manner and expression of these traditional influences, the latter nevertheless continue to be decisive in structuring the conditions under which children act.

In sum, a critical lens is required to address questions about the supposedly radical break instituted by the internet. Are children really more digitally skilled than their parents and does this vary by socio-demographic factors or by country? Just how innovative and creative is this generation of children and are their creative activities sometimes constrained by circumstances? It still seems that, for some, the internet is a rich, engaging and stimulating resource, while for others, it remains a narrow, sporadically used one. While some of these issues are addressed in the chapters of this book, the more important point is that this critical perspective on claims about contemporary childhood informs the volume as a whole.

### **Beyond moral panics: from risk to harm**

The next level of framing concerns the conceptualisation of risk and harm. Children’s safety gives rise to considerable public anxiety, even moral panic, over childhood freedom and innocence, an anxiety compounded by uncertainty about the power of new and complex technologies and the mass media’s tendency to generalise from individual instances of harm. The result is a context fraught with public and policy debate polarised by highly protectionist versus libertarian positions, which, it

often seems, impede both analysis and proportionate decision-making. In relation to risk, there is a complex relation between evidence and policy. This is partly because in our previous research we have demonstrated how the evidence base is at best patchy in terms of revealing the incidence and nature of the harms that children can incur on line and the benefits of particular policy actions (whether state intervention, industry self-regulation, education initiatives or awareness-raising). While the chapters in this volume aim to help fill this gap through looking at evidence about harm, it is first vital to consider the very nature of risk and harm.

To provide some initial idea of the topics being considered, *EU Kids Online* classifies the risks of harm to children from their online activities, again adopting a child-centred focus. In other words, as well as recognising the range of risks high on the public agenda, we also consider the potential role of the child and the child's activities in encountering these risks. Starting with the child's perspective permits us to ask questions not only about what the risks are, where they come from or what consequences they have, but also about what in the child's life (in terms of circumstances, motivations or interests) led them to encounter particular risks and how they respond once risks have been encountered (as individuals but also in relation to their peers and family). Thus we distinguish content risks, where the child is positioned as the recipient of, usually, mass produced images or text (although user-generated content is of growing significance), from contact risks, in which the child participates in some way, albeit possibly unwillingly or unwittingly, and both differ from conduct risks, in which the child is an actor in a peer-to-peer context, again more or less knowingly (Hasebrink et al., 2009) (see Table 1.1).

#### TABLE 1.1 ABOUT HERE

Each of these risks has been discussed, to a greater or lesser degree, in policy circles, and some have been the focus of considerable multi-stakeholder initiatives. Crucially, though, while consensus is building about the range of risks, the nature of the harm at stake is not always clear. This may seem surprising, yet it remains the case that the harm associated with any particular risk tends to remain implicit, unstated even in the policy circles designed to address or reduce it. For example, although society tends to be anxious about children's exposure to pornography or racism or the circulation of sexual messages, the nature of the harm they cause, which, presumably, motivates the anxiety, is often ill-defined. Does society worry about children's exposure to pornography, for example, because it will upset them in the here-and-now, or because it will damage their sexual development in the future, or because it undermines their childhood innocence, or for some other reason? Not only is the nature of harm associated with certain online risks often unclear but, in addition, the measurement of harm is difficult empirically and also in theoretical terms. Although we draw on research that seeks to assess the consequences of exposure to certain risks, in keeping with our child-centred perspective, in this book our intention is to give children a voice by listening to what they say bothers or upsets them. This reveals an agenda of concerns that does not always mirror that of adults.

In terms of theory, we recognise that although the word 'risk' can have different connotations, we conceive of it primarily as the probability of harm (Hansson, 2010). Drawing on the commonly used analogy to road safety breaks, of all those children who cross roads, a small percentage will have an accident: the risk (or probability) of harm is calculable and is a function of the likelihood of accident and its severity. However, this analogy runs into problems when considering the digital

world. Among those children who meet new people online, the percentage abused by a stranger is unknown, notwithstanding the instances of criminal and clinical cases. Consequently it tends to be the risk – meeting new people online – rather than the harm, on which policy focuses, and not just to guide or protect (the equivalent of road safety training and traffic management systems), but also to prevent such meetings in the first place. This stands in contrast to the claim that one of the potential benefits of the internet is that it allows us to expand our social world, including through new online contacts.

Certainly, online as well as offline, harm does occur (though for some risks, such as exposure to pornography, it is less clear). But, in a context where the harm remains unspecified or elusive, it is important to recognise the difficulty of balancing the harm caused to the few who become victims against the resilience gained by the majority of children who, for whatever reason, learn to manage risk.. Significantly, the research reported in the book shows that, in most cases relating to children's internet use, the probability of harm associated with particular risks appears relatively low. One further consideration is that the same risk might result in new opportunities (learning about sex from pornography, or making new friends). Given that risks do not inevitably result in harm and that risks must always be offset against benefits, research and policy actors clearly need to proceed with caution when intervening to manage the risk factors (which increase the probability or severity of harm) and/or the protective factors (that reduce harm) in relation to children's internet use (Schoon, 2006).

### **Multi-stakeholder responsibility for empowering and protecting children online**

Whom does this book address? Without gainsaying the power of either political and economic interests, researchers expect evidence to inform the apportioning of responsibility across government, educators, industry, the third sector, families and others, and to guide each category about how to empower and protect children online (Nutley et al., 2007). For complex reasons, different countries have different expectations about whether the primary responsibility lies with government, or with schools or parents. Many also see the industry that provides the content and services with which children engage as being responsible. As noted, the stakeholders face a difficult balancing between promoting online opportunities, which, without careful attention to safety, may promote online risk, and measures to reduce risk, which may have the unintended consequence of reducing opportunities. Judgements about when and how to intervene will depend heavily on what children themselves choose to do online and, additionally, how they cope when faced with something online that they find problematic, especially with the facility for going online in private places or on mobile devices, beyond the immediate guidance or protection of parents, teachers or even peers. In other words, the more that children are equipped to work out solutions for themselves – through skills, greater resilience, or access to online resources to support them – the less others will need step in to guide or restrict their online activities. Equipping children to cope, however, includes contributions from both parents and all those involved in the internet industry.

Parents have the primary responsibility for meeting the needs of their children, but in relation to the internet they seem to have been wrong-footed. In relation to familiarity with the new technologies, the generation gap is often significantly reversed, although the research in this volume suggests that this holds mainly in relation to older children. Sometimes, with little personal experience to draw on, parents are unsure about how to support their children's internet use beyond the provision of

access. Many parents resort to a range of approaches and part of the researcher's task is to identify which forms of parental mediation work better under which circumstances. Is talking to their child and taking an interest in what they do effective? Do protectionist measures – setting rules, installing parental controls or monitoring children's activities - actually prevent harm or do these backfire by reducing opportunities and even inadvertently encouraging the child to be deceitful? Despite scepticism that children will evade parental authority, the latter approach has been recommended by governments and industry, despite the fact that it clashes with many parents' inclinations to trust their child and to believe in his or her capacity to cope. This form of mediation also clashes with the growing tendency for children to assert their rights to privacy and to negotiate ever-earlier independence.

Thus, parents are faced with some complex dilemmas – guiding their children while encouraging their independence, recognising the necessity for risk-taking, but fearing its consequences, asserting their particular values, but expecting the state or industry to step in if things go wrong, hoping that schools will relieve them of the responsibility, but recognising that (many) children feel antipathy towards their teachers. It is being recognised increasingly that parents cannot, on their own, undertake the task of empowering or protecting their child online. As we will see, many expect schools to teach digital, as well as other forms of, literacy. Yet we need to remember that teachers establish and live out particular relationships with their pupils. Their roles are highly circumscribed – structurally (by school authorities, teacher training, and education curricula), normatively (they must treat all children equivalently and maintain authority relations) and practically (based on lack of time or inadequate technology). In fact, the research in this volume documents the (limited) extent to which children will turn to their teachers in the face of negative experiences online. More generally, the important question then becomes: under what conditions can children, parents and teachers, as well as others who have dealings with children in everyday life, receive empowerment, support and, indeed, protection? At the societal level, empirical findings on the strengths and, especially, the limitations of these everyday actors to manage their circumstances surely points to the imperative for institutional actors (government, industry, civil society and others) to play a complementary and vital role.

### **A working model for children's internet use: relating opportunities and risks**

The final level of framing relates to the model adopted in this volume. Here we bring together the arguments developed in the foregoing in order to generate a coherent account – in effect, a set of hypotheses – that anticipates how the many factors that shape children's internet use and consequences may be interrelated. The chapters in this book develop our previous work (Livingstone and Haddon, 2009) to explore a child-centred approach to children's experiences, perspectives and actions in relation to the internet, contextualising them within concentric circles of structuring social influences – family, community and culture (Bronfenbrenner, 1979). This approach acknowledges the complex interdependencies between the institutions and structures that enable or constrain children's opportunities and their agency in choosing how to act online while negotiating these possibilities and constraints (Bakardjieva, 2005). Only within this wider framework do we formulate research questions associated with the internet and internet use – eschewing the temptation, for reasons explained earlier, to treat the internet as the sole cause of change in children's lives (e.g., asking, how does the internet affect ...? What is the impact of the internet on ...?). Following Bronfenbrenner, although noting that his model can seem somewhat

static (rather than dynamic or focused on processes), our working model concerns processes that operate at three levels – that of the individual user, of social mediations (particularly, home, school and peer culture) and, third, the national or cultural level (where macro factors such as socio-economic inequality, educational policy or technological development intervene and shape both social and individual levels, and vice versa).

#### FIGURE 1.1 ABOUT HERE

Thus, while always contextualised at these three levels, and treating both the child and the country as the unit of analysis, the focus of the hypothetical path examined in the chapters that follow is as depicted in Figure 1.1. The analysis begins with the everyday contexts of children's internet use followed by accounts of their online activities. The aim is to identify the risk factors that shape online experience, then – taking nothing for granted – to identify the possible outcomes in terms of either harm as defined by the children themselves, or how they cope with risk so as to obviate harm. Children are all different and thus the analysis foregrounds demographic factors such as the child's age, gender and socio-economic status, as well as psychological factors such as emotional problems, self-efficacy and risk-taking. Similarly, the social factors that mediate children's online and offline experiences, especially the activities of parents, teachers and friends, as well as an array of national-level factors, serve also to differentiate among children's online experiences, which necessarily complicates the findings reported in this volume.

#### FIGURE 1.2 ABOUT HERE

The model in Figure 1.2 was operationalised in the design of the survey interviews with children, which began by scoping children's internet use (amount, device, location of use), followed by a mapping of their online activities (opportunities exploited, skills developed, risky practices engaged in) and online risks encountered. Children's actions cannot, on their own, be classified as 'beneficial' or 'harmful': such judgements depend on the outcome of these actions rather than the activity itself. There are some activities that are likely to prove beneficial (e.g., school work) and others that seem rather negative (e.g., bullying others). However, many are indeterminate (e.g., making new friends online), and some involve a blurring of the boundary between risk and opportunity – for example, activities motivated by the desire to take risks, which enables young people to explore the confines of their social worlds, and to learn by transgressing as well as adhering to social norms thereby building resilience.

Children go online in a particular environment: they engage with certain services; the online interfaces they visit have specific characteristics; some content is more available or easier to access; and, crucially, many other people are online simultaneously. These 'environmental factors' interact with the children's activities to shape their online experiences. Some factors, labelled 'opportunities', may enhance the benefits of going online: for example, the provision of own-language creative or playful content, or a lively community of people with the same hobby. Others, labelled 'risks', may increase the incidence or severity of harm: for example, the ready availability of explicit pornography or the activities and opinions of people who are aggressive, racist or manipulative. Some factors are ambiguous: for example, video hosting sites may be fun, creative and empowering, but may infringe copyright rules, exploit intimacy or facilitate hostile interactions.



In the *EU Kids Online* project, it was impossible to tackle all areas in which there may be risks to children, and hence four main risks formed the focus of the study. These were selected both because they attract considerable public and policy interest and also because there is already academic theory and evidence on which to build: encountering pornography, bullying/being bullied, sending/receiving sexual messages (or ‘sexting’) and going to offline meetings with people originally met online. The project also examined the risks linked to negative user-generated content and personal data misuse, although these have been little studied thus far in relation to children and young people. However, as already noted, risks may not necessarily be problematic and so - as befits our child-centred approach – we allowed the claim of harm (or otherwise) to rest with the child. Finally, the children’s online experience of risk, whether problematic or not, was pursued further to understand how children respond to and/or cope with such experiences. To the extent that they do not cope the outcome may be harmful, but to the extent that they do cope, this is a sign of their resilience.

The shaded funnel in Figure 1.2 illustrates that the focus of the project encompasses only a part of the larger picture of children’s internet use. It is important to remember that the latter includes the many benefits of internet use that are beyond the scope of this volume. Thus, the funnel indicates a narrowing analytical focus that does not capture precisely the experience of most children who use the internet. As the chapters in this book show, we can hypothesise that most children in Europe are treading the path from internet use, through a range of activities online, but that only a subset of them encounter the risk factors that increase the likelihood of harm, and only a subset of that subset experiences harm as a consequence. While this book more generally focuses on the potentially negative dimensions of the online world, that is precisely because it is addressing policy concerns and hence it does not seek to capture an overall picture of children’s life online. Hence, the last message in framing this volume is that, in enquiring into the factors that lead a minority of children to experience harm, it should be remembered that for most children, the consequences of using the internet are generally positive.

Table 1.1: Risks associated with children’s internet use (exemplars)

	<i>Content</i>	<i>Contact</i>	<i>Conduct</i>
	Receiving mass-produced content	Participating in (adult-initiated) online activity	Perpetrator or victim in peer-to-peer exchange
<i>Aggressive</i>	Violent/gory content	Harassment, stalking	Bullying, hostile peer activity
<i>Sexual</i>	Pornographic content	‘Grooming’, sexual abuse or exploitation	Sexual harassment, ‘sexting’
<i>Values</i>	Racist/hateful content	Ideological persuasion	Potentially harmful user-generated content
<i>Commercial</i>	Embedded marketing	Personal data misuse	Gambling, copyright infringement

Figure 1.1: The *EU Kids Online* model

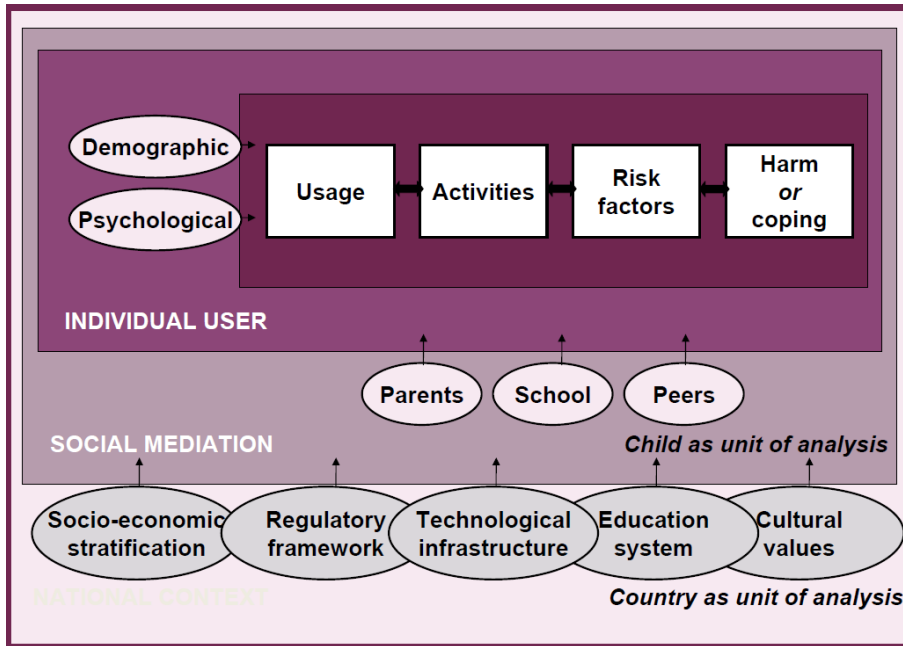
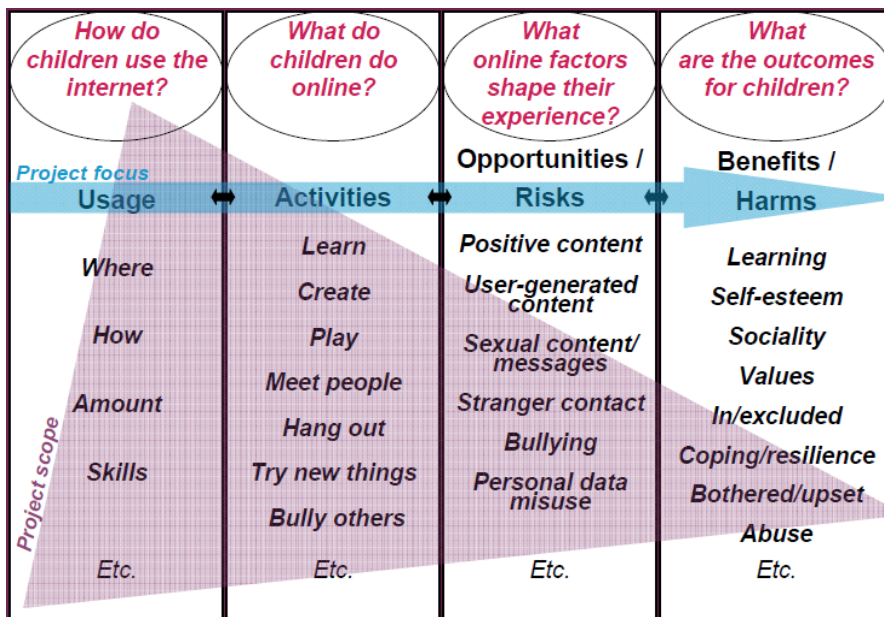


Figure 1.2: Operationalising the *EU Kids Online* model



## References

- Bakardjieva, M. (2005) *Internet society: The internet in everyday life*, London: Sage.
- Beck, U. (1986/2005) *Risk society: Towards a new modernity*, London: Sage.
- boyd, d. and Hargittai, E. (2010) 'Facebook privacy settings: Who cares?', *First Monday*, vol 15, no 8. not in text
- Bronfenbrenner, U. (1979) *The ecology of human development*, Cambridge, MA: Harvard University Press.
- Buckingham, D. (2006) 'Is there a digital generation?', in D. Buckingham and R. Willett (eds), *Digital generations*, Mahwah, NJ: Lawrence Erlbaum Associates, pp 1–13.
- Coontz, S. (1997) *The way we really are: Coming to terms with America's changing families*, New York: Basic Books.
- Cunningham, H. (2006) *The invention of childhood*, London: BBC Books.
- Golding, P. (2000) 'Forthcoming features: Information and communications technologies and the sociology of the future', *Sociology*, vol 34, no 1, pp 165–84.
- Hansson, S.O. (2010) 'Risk: Objective or subjective, facts or values', *Journal of Risk Research*, vol 13, no 2, pp 231–38.
- Hasebrink, U., Livingstone, S., Haddon, L. and Olafsson, K. (2009) *Comparing children's online opportunities and risks across Europe: Cross-national comparisons for EU Kids Online*, London: London School of Economics and Political Science.
- Helsper, E. and Eynon, R. (2010) 'Digital natives: where is the evidence?', *British Educational Research Journal*, vol 36, no 3, pp 502–20.
- Jenkins, H. (2006) *An occasional paper on digital media and learning. Confronting the challenges of participatory culture: Media education for the 21st century*, Chicago, IL: The John D and Catherine T MacArthur Foundation.
- Livingstone, S. (2003) 'Children's use of the internet: reflections on the emerging research agenda', *New Media & Society*, vol 5, no 2, pp 147–66. not in text
- Livingstone, S. (2009) *Children and the Internet: Great expectations, challenging realities*, Cambridge: Polity
- Livingstone, S. and Haddon, L. (eds) (2009) *Kids Online: Opportunities and risks for children*, Bristol: The Policy Press.
- Nutley, S.M., Walter, I. and Davies, H.T.O. (2007) *Using evidence: How research can inform public services*, Bristol: The Policy Press.
- Prensky, M. (2001) 'Digital natives, digital immigrants', *On the Horizon*, vol 9, no 5, pp 1–2.
- Schoon, I. (2006) *Risk and resilience: Adaptations in changing times*, New York: Cambridge University Press.
- Staksrud, E., Livingstone, S. and Haddon, L. et al. (2009) *What do we know about children's use of online technologies? A report on data availability and research gaps in Europe*, London, London School of Economics and Political Science.

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<sup>1</sup> The 25 countries, which differ slightly from the EU 25, are as follows: Austria (AT), Belgium (BE), Bulgaria (BG), Cyprus (CY) the Czech Republic (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE), Greece (EL), Hungary (HU), Ireland (IE), Italy (IT), Lithuania (LT), the Netherlands (NL), Norway (NO), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Spain (ES), Sweden (SE), Turkey (TR) and the UK. Unless countries are specified, findings reported throughout this volume are weighted averages across all countries.