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**UK CHILDREN GO ONLINE:  
Balancing the opportunities against the risks**

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# **UK CHILDREN GO ONLINE: Balancing the opportunities against the risks**

**Sonia Livingstone**

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## **ABSTRACT**

As UK households gain access to the internet, many questions arise for social scientists and policy makers. This working paper overviews a project designed to understand the balance of opportunities and risks afforded to children and young people by the diffusion and appropriation of the internet in everyday life. The project, UK Children Go Online, sought to steer a course between utopian and dystopian views by conducting a substantial multi-method empirical project focusing on four key dimensions of use - (1) access, inequalities and the digital divide; (2) undesirable forms of content and contact; (3) education, informal learning and literacy; and (4) communication, identity and participation. Gradations in frequency of internet use, significantly explained by demographic, use and expertise, predicted take-up of online opportunities, this suggesting a new divide between those for whom the internet is an increasingly rich, engaging and stimulating resource and those for whom it remains a narrow, unengaging, if occasionally useful, resource. Notably, despite the widespread notion that young people are the internet experts, the research identified a range of ways in which children struggle with the internet. Last, the research showed that it is those who take up more online opportunities, not fewer, who encounter more of the risks associated with internet use. This raises particular challenges for parents and schools in supporting children as the task of determining what is trustworthy, reliable or safe online.

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## **1. INTRODUCTION**

As UK households gain access to the internet, the growing significance of the internet in everyday life raises questions for social scientists and policy makers. Public discussion is moving beyond the initial hyperbole of high hopes or moral panics. This is occurring as a

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complex picture emerges of the diverse ways in which people use this new technology, suggesting a range of ways in which the internet is socially shaped and socially embedded within the practices of everyday life (Lievrouw and Livingstone, 2006). In Western democracies, the research literature is shifting from asking about access to asking about use, particularly regarding the quality, meaning, diversity and consequences of internet use across different contexts (Warschauer, 2003).

Specific questions arise regarding children and young people. Is the internet affording them more opportunities? What skills or literacies are they gaining as a result? Are children encountering new risks online? How are parents and teachers responding? Notwithstanding the paucity of data on many of these questions (Livingstone, 2003), young people are the target of a range of policy initiatives designed to realise the benefits of the internet while minimising the potential risks. To inform these initiatives, a thorough account of internet access, attitudes, skills and uses is essential. This working paper presents a project designed to inform the academic and policy agenda in these ways.

## **2. CONTEXT**

Two broad and competing frameworks have emerged to interpret the significance of new forms of information and communication technology. One framework stresses historical continuities, sceptical of utopian and dystopian claims for a technology-led future, critically questioning whether everyday life is being fundamentally transformed. The opposing framework postulates radical change, seeing the internet as a facilitator of larger social, cultural, political and psychological changes – whether towards the network society, the postmodern condition or a dystopian nightmare. The project, *UK Children Go Online* (Livingstone and Bober, 2005) aimed to steer a course between these polarised approaches.

Drawing on the 'continuity' approach, the project contextualised new media in relation to older media. The historical lesson of previously-new media is one of diversification rather than displacement, with repositioning and specialisation of older media (Bolter and Grusin, 1999). Since little evidence supports claims for the child as dramatically affected by the supposed harms (or benefits) of changing media, this approach invites us to locate the young internet user within ever-widening social circles – home, family, peers, school, community, nation. The internet, after all, represents one element among many in a more gradual and multidimensional process of social change - in the family and childhood, leisure

and lifestyles, youth culture and consumer culture, work and education and in social values, particularly in relation to globalisation (Castells, 2001; Drotner, 2000; Facer, Furlong, Furlong, and Sutherland, 2003; James, Jenks and Prout, 2001).

Additionally, drawing on the 'change' approach, while eschewing any simple technological determinism, the project asked how information and communication technologies may drive forward the inevitable processes of social and cultural change. For example, how do children respond to the introduction of the plural, even anarchic, hypertextual forms of knowledge representation, which may be replacing the once-linear, authoritative media texts (educational, public service, adult-approved)? Is the once-mass audience fragmenting into multiple individualised niche markets and does this matter? What does it mean to claim that the boundaries between once-distinct domains of entertainment/education, work/leisure, public/private, local/global and producer/consumer are becoming blurred (Buckingham, 2001; Kress, 2003; Snyder, 1998)?

Despite their differences, both these approaches remain strongly media-focused, and so are usefully complemented by a user- or child-centred focus. This regards children as active and interpretative agents, albeit varying in competence according to age (or psychological development) who appropriate and shape the meanings and consequences of the 'new' through a series of well-established social and semiotic practices (James, Jenks, and Prout, 1998; Seiter, 2005). For, whether information and communication technologies are incorporated into the ongoing stream of social life or whether they reorient or open up alternative paths, new media depend on the beliefs and actions of their users to activate particular trajectories over others and to give them meaning and value in daily life (Bakardjieva, 2005). Hence we need an account of the changing conditions of childhood, together with an analysis of how children themselves play a role – through their imaginative responses, their creative play, their micro-practices of daily life - in establishing the emerging uses and significance of the internet (Turkle, 1995). Particularly, this approach avoids construing children as passive or vulnerable rather than as agents in their own right, although nor should their oft-claimed sophistication in internet use be exaggerated.

### 3. RESEARCH AIMS AND METHODS

The *UK Children Go Online* (UKCGO) project was designed to contribute new qualitative and quantitative findings to our understanding of how 9-19 year olds are accessing and using the internet, deliberately balancing and integrating the investigation of online opportunities and risks. Specific objectives were to provide in-depth qualitative data on the emerging place of the internet in children and young people's lives so as to ensure that children's own voices are heard in public and policy debates. This was complemented by providing detailed, national survey data documenting the extent and nature of understandings, practices and contexts of internet use among 9-19 year olds and their parents. The overall intention was to target the research findings on four key policy-relevant domains: (1) access, inequalities and the digital divide; (2) undesirable forms of content and contact; (3) education, informal learning and literacy; and (4) communication, identity and participation.

The research employed a triangulated multi-method design.

**Phase 1:** 14 focus groups were conducted with 9-19 year olds around the UK (Summer 2003). Nine family visits combined parent and child interviews with in-home observations of internet use (2003/4). Interviews were audio-taped, transcribed and analysed using Nvivo.

**Phase 2:** A national, in-home, 40-minute face to face survey of 1511 9-19 year olds and 906 parents of the 9-17 year olds (i.e. not of those aged 18-19), was conducted using Random Location sampling across the UK. The design was informed by the qualitative research, the User and Children's Advisory Panels and other comparable surveys. After piloting the survey, fieldwork was conducted via multi-media computer-assisted personal interviewing (CAPI) with children, including a 'private' self-completion section for sensitive areas of questioning, plus a paper questionnaire completed by their parents (January-March 2004). The dataset was cleaned and analysed using SPSS and AMOS. All percentages reported in this article are weighted to the UK population and rounded for clarity.

**Phase 3:** 13 focus group/paired-depth interviews combined semi-structured discussion with website evaluation and observations of internet use conducted both at home and in school (Autumn 2004). Interviews were recorded and analysed as above.

Ethical considerations are addressed in the project ethics policy (see: [www.children-go-online](http://www.children-go-online); Graue and Walsh, 1998). All participants, plus the parents of under 18 year olds, signed an age-appropriate 'informed consent' form outlining project aims, use of data, anonymity, etc. Families received internet safety information from Childnet-International to address any concerns. Post-survey quality-checks (telephone interviews by the market research agency) on 10% of respondents reported few problems with the conduct of the survey). Participating schools and families received the project's final report.

#### **4. A PORTRAIT OF INTERNET USE AMONG BRITISH YOUTH**

##### *4.1 Access, inequalities and the digital divide*

There are very few children who do not use the internet, unlike for their parents and for adults in general, making the simple assertion of a binary divide between haves and have-nots, or users and non-users, no longer applicable to young people. However, this is not to say that issues of access are no longer relevant. The findings revealed inequalities by age, gender and socioeconomic status in relation to their quality of access to and use of the internet. Specifically, the survey found that nearly all children and young people (98%) have used the internet: 75% of 9-19 year olds have accessed the internet from a computer at home, and school access is near universal (92%); 36% have more than one computer at home, 24% live in a household with broadband access; and 19% have internet access in their bedroom. Platforms are diversifying, with online access via computers (71%), mobile phones (38%), digital television (17%) and games consoles (8%). Socioeconomic differences are sizeable: 88% of middle class though only 61% of working class children have accessed the internet at home.

Use is fairly frequent: 9-19 year olds are divided between daily users (41%) and weekly users (43%); however, some make low (13%) or no (3%) use of the internet. Of these, 47% of low/non-users say that they lack access, 25% are not interested, 15% don't know how to use it, and 14% lack the time. Most 9-19 year olds are online for less than an hour – still less than they watch television or listen to music: 19% spend about ten minutes per day online and 48% between half an hour and one hour.

Of 9-19 year olds who go online daily or weekly, 90% use it for school/college work, 94% for information, 72% to send emails, 70% to play games, 55% to send instant messages and 45% to download music. Further, 44% look for information on careers/education, 40% look for products/shop online, 26% read the news and 21% use chat rooms. Some use it for less-approved activities: among 12-19 year olds who go online daily or weekly, 21% admit to copying schoolwork, 8% claim to have 'hacked', 5% visited a dating site, 4% have sent a hostile/bullying message and 2% visited a gambling site.

Importantly, access strongly influences, but does not wholly determine, use. Multivariate analyses show that middle-class teenagers, those with home access and those who have spent more years online tend to use the internet more often, spend more time online per day and, consequently, have greater online skills (see Eastin and LaRose, 2000). Parents' experience of the internet matters: daily users have parents who use the internet more often and are more expert than less frequent users. While inequalities across households are largely socio-economic, within households age, gender and generation matter. Age trends are evident across all aspects of access and use while gender matters more for certain kinds of use, though less so for overall amount of use (Livingstone and Helsper, 2007).

Significantly, socio-economic differences in amount of use disappear if just those with home access are compared: thus, while boys and older children use the internet more whether or not they have home access, the greater use among middle-class children is a result of their greater home access. Initiatives to equalise access might therefore reduce differences in use across households (i.e. by socio-economic status) but not within them (i.e. by age and gender). Such initiatives will, however, be complicated by the 'moving target' of internet access, with the diffusion of broadband, the proliferation of platforms and the diversification of access locations all providing ways for middle-class households to maintain their advantage.

Looking beyond the idea of a binary divide, one can discern a continuum of digital inclusion (Livingstone and Helsper, 2007; Warschauer, 2003). Gradations in frequency of internet use map onto a progression in the take-up of online opportunities among young people (from basic through moderate to broad and then all-round users), with demographic, use and expertise variables all playing a role in accounting for variations in the take-up of online opportunities. Indeed, it seems that a new divide is opening up between those for whom the internet is an increasingly rich, engaging and stimulating resource and those for whom it

remains a narrow, unengaging, if occasionally useful, resource (Livingstone and Bober, 2004).

#### *4.2 Communication, identity and participation*

"I think mobile phones and the internet are a good way of keeping in contact with friends. For example, I have friends in other countries who use MSN. I can send them an email everyday rather than phoning them up and running up a huge phone bill, or sending them a text message. And it's just a good way of keeping in contact with people." (Lorie, 17, from Essex)

Once they gain access, young people are primarily excited by the internet as a communication medium, with internet (instant message, email, chat) and mobile phone (talk, text) used mainly to contact local friends. They make skilful choices about communication, comparing the characteristics of different channels in terms of intimacy, embarrassment, privacy and cost, often preferring mediated to face-to-face communication. Generally, whether for passing time, making arrangements, getting advice, gossiping or flirting, the phone and text messaging are preferred over emailing or instant messaging. So, while 53% of email, IM and chat users think that talking to people on the internet is less satisfying as talking to them in real life, almost half have a different view. Most online communication is with local friends. Being in constant contact is highly valued, and they show little interest in contacting strangers. One in four (25%) of 12-19 year old daily and weekly users say they go online to get advice. (Note that this research was conducted just before the advent of social networking sites – see Livingstone, under review, for research on this topic).

Interactive uses of the internet are popular: 44% 9-19 year old weekly users have completed a quiz online, 25% have sent an email or text message to a website, 22% have voted for something online and 17% have sent pictures or stories to a website. Further, 54% of 12-19 year olds who use the internet at least weekly have sought out sites concerned with political or civic issues. Interestingly, many visit only one or two civic sites, and they take little further action; similarly, not all their websites are uploaded or maintained; the implication is that youthful participation online is enthusiastic but often short-lived, and it seems that many lack the motivation to participate. Indeed, follow-up focus group discussions suggest that it is when the institutional structures (school, family, peers) that shape young people's daily lives support civic participation that young people feel enabled to engage with the civic or public sphere, on- or offline (Livingstone, 2007a).

The greater internet use and internet self-efficacy, on average, of boys, middle class and older teens has further consequences, for it seems to enhance the likelihood that these teenagers will interact online, over and above the effect of demographic variables. However, it is not associated with a greater likelihood of visiting of civic sites. In other words, it appears that online interactivity and, particularly, online creativity can be encouraged through the very experience of using the internet. The same is less the case for visiting civic websites because here the key determinants of visiting such websites are demographic -- age, gender and social class (Livingstone et al., 2005). Consequently, a cluster-analysis identified three groups of teenagers - interactors, the civic-minded and the disengaged - each of which is distinctive in its social context and approach to the internet (Livingstone, Bober, and Helsper, 2005).

Further, drawing on insights from audience reception research, the project addressed attempts to engage youth through civic sites, analysing interviews with website producers and teenagers to contrast the aim of providing a youthful public sphere online with the difficulties of enhancing young people's political efficacy (Livingstone, 2007b). Indeed, website producers stress 'being heard', but for young people, 'having your say' is not the same as 'being listened to', and many are critical of the online invitation to participate. This is partly because, as the qualitative research suggests, they are constructed by adult society less as citizens with rights and responsibilities than as citizens-in-waiting.

#### *4.3 Education, informal learning and literacy*

The picture of internet use in relation to learning is rather similar. The internet has become a key information resource to support school work, and 60% of pupils regard the internet as the most useful tool for getting information for homework. Yet, despite the widespread notion that young people are the internet experts, the research identified a range of ways in which children struggle with the internet. Children and young people encounter some difficulties with searching, critical evaluation and a range of online skills, partly because they have received only patchy educational support (Livingstone and Bober, 2004). Thus Hazel (17, from Essex) complains that, "I'll sometimes type in something, and I'll get pages of, you know ... for that search, and it's just, I can never find what I'm looking for. Unless you are willing to spend an hour going through each page. It's ridiculous."

Many young people lack key skills in evaluating online content: 38% of pupils aged 9-19 trust most of the information on the internet, and only 33% of 9-19 year old daily and weekly users have been taught how to judge the reliability of online information. Therefore, they tend to be ignorant of the motives behind the websites they were using and many, it was clear, have not thought about this question. Few are aware of the commercial interests or persuasive strategies at work. Asked why people develop websites, Jim (14, from Essex) tells us, "because there's some people that have nothing better to do than make a website that's ... about rubbish". Similarly, Steve (17, from Manchester) suggests, "because someone's interested in what it is. Somebody's just thought this is my interest, and I'm going to share it with the world".

Perhaps as a consequence of this lack of critical literacy, most tend to trust the information found online – particularly if it is professionally presented and if it neatly fits their requirements. Of course, some have learned distrust. Faruq (15, from London) explains, "It's like you don't know who's doing what, who's website it is, who wants what, who wants you to learn what. So you don't know who's put what information there, but ... it's reliable – but you don't know who's put it, who wants you to gain what from that information." But how he should then use the internet is unclear to him.

While the qualitative work suggests that young people prefer to learn about the internet informally, through trial-and-error, it is of concern that a sizable proportion has received little guidance on safety, reliability and searching – most notably the youngest and oldest groups. Indeed, the 18-19 year olds consistently show lower access, use and skills, compared with 16-17 year olds and younger teens, reflecting both their later introduction to the internet and their reduced access after leaving school. The 9-11 year olds reveal a greater desire to learn certain skills (e.g. webpage creation) than seems currently supported in schools. Although most parents have acquired internet access at home in order to support their children's education, their attitudes are highly ambivalent towards this both-beneficial and risky, difficult technology. Interestingly, parents still think that books are most likely to help their child do better at school (82%), followed by the internet (73%) or the computer (40%).

#### *4.4 Undesirable forms of content and contact*

One reason that adults – parents and teachers – are ambivalent in encouraging young people to use the internet freely is the fear of unwelcome content or contact. These risks of going online gain far more publicity, and arouse far more anxiety, than the risk of not going online (i.e. the digital divide). The UKCGO survey found that more than half have seen pornography online (57% of 9-19 year old daily and weekly users), mostly unintentionally: 38% of 9-19 year old regular users have seen a pornographic pop-up advert while doing something else, 36% have accidentally found themselves on a porn site when looking for something else, and 25% have received pornographic junk mail. Parents and children agree that the internet is more likely to expose children to pornography than are television, video or magazines. Further, 22% of 9-19 year old daily and weekly users who have accidentally ended up on a site with violent or gruesome pictures, while 9% have found a site hostile or hateful to a group of people. However, the survey and, especially, the focus group findings reveal mixed responses to online porn: more than half claim not to be bothered by it, but a sizeable minority are upset or disgusted. Interestingly, 45% of 18-19 year old internet users who have seen any pornography (on/offline) think they were too young to have seen it when they first did (Livingstone and Bober, 2006).

For the risks of online communication, the picture is rather different, partly because the media publicity has brought these to the attention of many. Adrian (10, from Hertfordshire) tells us, "my mum doesn't let me go on chat rooms ... They find out your address and come and rob you and things. That's why I don't go on it." Sean (15, from Essex) adds, "Because of all these adverts about paedophiles and stuff, so it's just best to stick with people that you know." One third of 9-19 year old daily and weekly users have received unwanted sexual (31%) or nasty comments (33%) online or by text message, though only 7% of parents are aware that their child has received sexual comments and only 4% that their child has been bullied online. Also important is the frequency with which children divulge personal information online: 46% say that they have given out personal information to someone that they met online; further, 40% say that they have pretended about themselves online.

Although most children are aware from media coverage of the risks of meeting people they don't know, 30% have made an online acquaintance, and 8% say they have met face to face with someone whom they first met online. Nonetheless, follow-up questions reveal that the vast majority told a friend or parent and, generally, went with a friend to the meeting,

resulting in very few less than positive meetings. Attending a meeting offline with a friend made online was shown by multiple regression analysis to be more typical of older teens, both boys and girls, who have not been using the internet for very long, though they claim more online skills. They are, interestingly, less shy offline (than those who have not attended a meeting) but they are more likely to report being sensation-seekers who are dissatisfied with their lives (see Livingstone and Helsper, under review, for survey measures). Like those who make friends online, those who feel more confident communicating online than offline and value the anonymity of the internet are more likely to go to meet someone offline (Livingstone and Helsper, in press). Further, it turned out that those children and teens who have difficulty discussing personal issues with their parents, or who feel their parents to be 'conformity-oriented' rather than 'conversation-oriented' (see Ritchie and Fitzpatrick, 1990), take some greater risks online (visiting chat rooms and meeting online friends offline), possibly because they feel more confident communicating online than they do offline.

#### *4.5 Balancing opportunities and risks - the role of internet literacy*

Significantly, the experience of online opportunities and risks – so often researched quite separately - was found to be positively related: thus, those who take up more opportunities encounter more risks, and vice-versa, and those groups inclined to gain more opportunities (older, middle class) also encounter more risks, as do boys compared with girls (Livingstone, Helsper, and Bober, submitted). In other words, online opportunities and risks go hand in hand: the more children and young people experience the one, the more they also experience the other, and vice versa. The demographic influences on opportunities and risks are, crucially, if unsurprisingly, mediated by further factors, as explained below.

Thus, age directly influences opportunities, but it only indirectly influences risks. In other words, older teenagers do more things online because they are older, but the reason they specifically encounter more risks online is because they tend to have better access, to use the internet more and/or to have greater online skills. Socio-economic status has no direct influence on either outcomes or risks, but only influences access. This results in inequalities that have indirect but significant consequences for online opportunities and risk.

As noted earlier, the policy implication here is intriguing: while middle-class parents often provide better access for their children, for middle- and working-class children with equivalent access, there are no further, direct effects of socio-economic status on use,

literacy or opportunities. Enhancing quality of access for less privileged children could, therefore, effectively reduce the digital divide that exists at present as regards the benefits of the internet. As regards gender, the divide that existed for computers does not appear to carry over to the internet, though boys – irrespective of access or skills - tend to encounter more risks, especially pornography.

Online skills in particular were found to make a positive contribution to online opportunities. They were also found to mediate between demographic factors and access, and between access and opportunities. In other words, while both demographics and access have a direct and beneficial influence on opportunities, being more skilled helps too. This suggests that, in addition to interventions designed to equalize access (as noted above), interventions targeted at increasing specific skills will also enhance the take up of online opportunities (Livingstone et al., submitted).

In conclusion, it is not the case that those who are more focused on the opportunities are more likely to avoid the risks. Nor is it the case that those with greater literacy have found a way to avoid the risks as they pursue the opportunities. Not only is taking up online opportunities proving, for many teenagers, an experience associated with some degree of risk, but encountering online risks seems to diminish the opportunities that teens are likely to take up thereafter. The strong, positive association between opportunities and risks points up the dilemma that parents and regulators face. Increasing opportunities increases the risks. Restricting internet use so as to reduce the risks also restricts the opportunities. It appears that, as with print literacy and other skills (social skills, practical skills), an increase in skills cannot ensure that the activities this enables are socially approved ones.

#### *4.6 Regulating the internet at home*

Parents are attempting a range of mediation strategies, drawing on but also adapting the strategies long developed for television. They have a strong preference for social over technical forms of mediation, thus balancing active co-use and restrictive regulation. Further, they prefer both these strategies over the implementation of either technical restrictions (e.g. filtering) or software monitoring practices. However, there are significant gaps in understanding between parents and children (in internet expertise, in awareness of risks and in acknowledgement of domestic regulation implemented) which impedes effective regulation of children's internet use within the home. For example, most parents claim that

they directly support their child on the internet, but their children are less likely to report this. Similarly, most parents ban their children from giving out personal information, yet only half of children recognise this rule. Half also claim, more importantly, to have given out such information (Livingstone and Bober, 2006).

Moreover, children are adept at evading regulation, suggesting a game of strategy and tactics played out between parents and children. The qualitative work, followed up by the survey, revealed a range of ways in which children and young people value and protect their privacy online, being more concerned about privacy from their parents than from commerce (Livingstone, 2006). Two thirds (63%) of 12-19 year old home users have taken some action to hide their online activities from their parents, and 69% of 9-17 year old daily and weekly users say they mind their parents restricting or monitoring their internet use. Theoretically, this raises interesting questions regarding the demarcation of the public/private boundary at home. In policy terms, it raises problems for parental guidance and regulation. Further, the research identified a series of challenges for parents in managing their children's internet use – the greater internet expertise of children (18% of parents say they don't know how to help their child use the internet safely), the privacy of internet use, confusion over filtering (only 15% of parents say they can install this), and the difficulty of implementing clear rules.

Statistical analysis of the survey findings showed, further, that, contrary to the hopes of policy makers and parents, getting parental regulation of the internet right (so that children understand the rules and, consequently, the supposedly harmful consequences of certain online activities are actually reduced), is proving difficult (as, in fact, has long been the case for television and other media). It appears that simple parental bans on certain online activities are ineffective and that more subtle regulation can have unpredictable effects (Livingstone and Helsper, under review). Generally, if parents exert tight controls over their children's online activities, this seems to undermine children's freedom and privacy to explore and express themselves online, albeit also reducing the risks, while if they loosen these controls, children encounter more online risks but also more opportunities.

However, the simple expectation that increased regulation might directly reduce risks is not supported. Indeed, there was little clear evidence that parental mediation is effective, although there was a significant relation between restricting online interactions (e.g. banning email, chat and instant messaging) and reduced online risks. Neither active co-use, though widely practiced, nor technical/monitoring strategies have been found to be effective in

reducing risk (Liau, Khoo, and Ang, 2005; Mitchell et al., 2003; see also Kerr and Stattin, 2000). This presents a challenge for future research to identify the benefits, if any, of such parental mediation strategies. Further, although it is encouraging that restricting online interactions has some benefits, the costs of such a restrictive strategy, in terms of reducing teenagers' freedom to interact with peers online, must be weighed against its advantages in formulating future safety guidance directed at parents and teenagers (Livingstone and Helsper, under review).

## **5. FUTURE RESEARCH**

Findings in this field are keenly taken up by public policy makers. It is especially important to note that, insofar as policy positions parental regulation as a buffer against the impact of external harms, this is shown to be fallible, even undermining the 'democratic' family (Giddens, 1991). It seems that negotiation and trust, rather than authority and rules, are hallmarks of the changing family, and this makes the internet attractive to children precisely as a means to express their identity, autonomy and privacy apart from their parents. Thus, relying on parents to implement effective domestic regulation is problematic, not because parents are unwilling or incompetent but because this is a difficult task given the realities of everyday family life. Equally, relying on young people's media or internet literacy, even if greater than that of their parents, is also insufficient, for there are both limits on as well as strengths in their competences in this respect.

Given the pace of technological and market developments, it remains vital for research to continue to track and understand children and young people's access to and use of the internet and online technologies, in relation to both opportunities and risks. New questions will continue to arise as ICTs diversify and converge (television and internet, mobile and web, etc), altering domestic practices, challenging parental authority and stimulating new activities. In approaching these future challenges, this research project has stressed the importance for future research of hearing from children directly, of comparing the experiences of children and parents, and of triangulating qualitative and quantitative data in informing theory regarding the digital divide, learning and literacy, participation, online risks and parental mediation, and related issues central to the quality of life of children and young people.

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**References:**

- Bakardjieva, M. (2005) *Internet Society: The internet in everyday life*. London: Sage.
- Bolter, J. D. and Grusin, R. (1999) *Remediation: Understanding New Media*. Cambridge, Mass: MIT Press.
- Buckingham, D., Scanlon, M., and Sefton-Green, J. (2001) Selling the Digital Dream: Marketing Educational Technology to Teachers and Parents. In A. Loveless and V. Ellis (Ed.), *Subject to Change: Literacy and Digital Technology*. London: Routledge, pp. 20-40.
- Castells, M. (2001) *The Internet Galaxy*. Oxford: Oxford University Press.
- Drotner, K. (2000) Difference and Diversity: Trends in Young Danes' Media Use. *Media, Culture and Society*, 22(2): 149-66.
- Eastin, M. S. and LaRose, R. (2000) Internet Self-Efficacy and the Psychology of the Digital Divide. *Journal of Computer-Mediated Communication*, 6(1), <http://www.ascusc.org/jcmc/vol6/issue1/eastin.html>.
- Facer, K., Furlong, J., Furlong, R. and Sutherland, R. (2003) *ScreenPlay: Children and Computing in the Home*. London: Routledge/Falmer.
- Giddens, A. (1991) *Modernity and self-identity: Self and society in the late modern age*. Cambridge: Polity Press.
- Graue, M. E. and Walsh, D. J. (1998) *Studying Children in Context: Theories, Methods and Ethics*. Thousand Oaks: Sage.
- James, A., Jenks, C. and Prout, A. (1998) *Theorizing Childhood*. Cambridge: Cambridge University Press.
- Kerr, M. and Stattin, H. (2000) What parents know, how they know it, and several forms of adolescent adjustment: Further support for a reinterpretation of monitoring. *Developmental Psychology*, 36: 366-80.
- Kress, G. (2003) *Literacy in the New Media Age*. London: Routledge.
- Liau, A. K., Khoo, A. and Ang, P. H. (2005) Factors influencing adolescents' engagement in risky internet behavior. *CyberPsychology & Behaviour*, 8(2): 513-20.
- Lievrouw, L. and Livingstone, S. (2006) Introduction. In L. Lievrouw and S. Livingstone (Eds.), *Handbook of New Media: Social Shaping and Social Consequences* (Updated student edition ed.). London: Sage, pp. 1-14.
- Livingstone, S. (2003) Children's use of the internet: Reflections on the emerging research agenda. *New Media and Society*, 5(2): 147-66.

- Livingstone, S. (2006) Children's privacy online. In R. Kraut, M. Brynin and S. Kiesler (Eds.), *Computers, phones, and the internet: Domesticating information technology*. Oxford: Oxford University Press, pp. 128-44.
- Livingstone, S. (2007a) Interactivity and participation on the internet: A critical appraisal of the online invitation to young people. In P. Dahlgren (Ed.), *Young Citizens and New Media: Strategies for learning democratic engagement*. London: Routledge, pp. 103-24.
- Livingstone, S. (2007b) The challenge of engaging youth online: Contrasting producers' and teenagers' interpretations of websites. *European Journal of Communication*, 22(2): 165-84.
- Livingstone, S. (under review.) Taking risky opportunities in youthful content creation on the internet. To be submitted to a special issue of *New Media and Society* on 'Authority and participation with digital storytelling'.
- Livingstone, S. and Bober, M. (2004) Taking up opportunities? Children's uses of the internet for education, communication and participation. *E-Learning*, 1(3), 395-419.
- Livingstone, S. and Bober, M. (2005) *UK Children Go Online: Final report of key project findings*. London: London School of Economics and Political Science.
- Livingstone, S. and Bober, M. (2006) Regulating the internet at home: Contrasting the perspectives of children and parents. In D. Buckingham and R. Willett (Eds.), *Digital Generations*. London: Lawrence Erlbaum Associates, pp. 93-113.
- Livingstone, S., Bober, M. and Helsper, E. J. (2005) Active participation or just more information? Young people's take up of opportunities to act and interact on the internet. *Information, Communication and Society*, 8(3): 287-314.
- Livingstone, S. and Helsper, E. J. (2007) Gradations in digital inclusion: Children, young people and the digital divide. *New Media and Society*, 9: 671-696.
- Livingstone, S., Helsper, E. J. and Bober, M. (submitted) Balancing opportunities and risks in teenagers' use of the internet: The role of online skills and family context. *Manuscript*.
- Livingstone, S., and Helsper, E. J. (in press) Taking risks when communicating on the internet: The role of offline social-psychological factors in young people's vulnerability to online risks. *Information, Communication and Society*.
- Livingstone, S. and Helsper, E. J. (under review) Parental mediation and children's internet use. *Journal of Broadcasting and Electronic Media*.
- Mitchell, K. J., Finkelhor, D. and Wolak, J. (2003) The exposure of youth to unwanted sexual material on the internet: A national survey of risk, impact, and prevention. *Youth & Society*, 34(3): 330-358.

Ritchie, L. D. and Fitzpatrick, M. A. (1990) Family communication patterns: Measuring intrapersonal perceptions of interpersonal relationships. *Communication Research*, 17(4): 523-544.

Seiter, E. (2005) *The Internet Playground: Children's access, entertainment, and mis-education*. New York: Peter Lang.

Snyder, I. (Ed.) (1998). *Page to Screen: Taking Literacy into the Electronic Era*. London: Routledge.

Turkle, S. (1995) *Life on the Screen: Identity in the Age of the Internet*. New York: Simon & Schuster.

Warschauer, M. (2003) *Technology and Social Inclusion: Rethinking the Digital Divide*. Cambridge: MIT.

**ANNEX: RESEARCH SAMPLES***The UKCGO children and young people's survey sample (N=1,511)*

<b>Age</b>	9-11 years (N=380), 12-15 years (N=605), 16-17 years (N=274), 18-19 years (N=251), Don't know (N=1)
<b>Gender</b>	Boys (N=842), Girls (N=669)
<b>SES</b>	AB (N=264), C1 (N=418), C2 (N=407), DE (N=422)
<b>Region</b>	England (N=1,228), Wales (N=69), Scotland (N=166) Northern Ireland (N=48)
<b>Ethnicity</b>	White (N=1,336), Non-white (N=171), Not stated (N=4)

*The UKCGO parents' survey sample (N=906)*

<b>Age</b>	18-24 years (N=5), 25-34 years (N=134), 34-44 years (N=470), 45-54 years (N=209), 55+ years (N=42), Not stated (N=46)
<b>Relation to child</b>	Mothers (N=659), Fathers (N=232), Other (N=10), Not stated (N=5)
<b>SES</b>	AB (N=167), C1 (N=254), C2 (N=257), DE (N=228)
<b>Region</b>	England (N=719), Wales (N=42), Scotland (N=109), Northern Ireland (N=36)
<b>Ethnicity</b>	White (N=841), Non-white (N=63), Not stated (N=2)

## The UKCGO focus group sample (phases 1 and 3)

School	Type	Size	Area	Location	Social grade	Achievement	Age	Date	N
<b>A</b>	Primary	97	Rural	Hertfordshire	Mixed	Above av.	10-11	July 2003	8
<b>B</b>	Secondary	369	Town/rural	Derbyshire	Middle class	Above av.	12-13	July 2003	8
<b>C</b>	Secondary	928	City	London	Working class	Above av.	14-16	July 2003 Dec 2004	8 + 6
<b>D</b>	Secondary	1,148	Town	Essex	Mixed	Above av.	13 14-15	July 2003	14
<b>E</b>	Post-16	2,010	Town	Essex	Middle class	Slightly above av.	16-17	July 2003	10
<b>F</b>	Post-16	2,911	City	Greater Manchester	Working class	Below av.	17-19	June 2003	7
<b>G</b>	Primary	501	City	South Yorkshire	Working class	Average	10-11	Nov 2004	8
<b>H</b>	Secondary	763	City	South Yorkshire	Working class	Below av.	14-15	Dec 2004	5
<b>I</b>	Primary	178	Town/rural	Oxfordshire	Mixed	Above av.	10-11	Dec 2004	8
<b>J</b>	Secondary	1,343	Town	Oxfordshire	Mixed	Above av.	14-15	Dec 2004	6

*Note: School information came from the most recent OFSTED inspection report and compared with National Average Performance levels (see [www.ofsted.gov.uk](http://www.ofsted.gov.uk)).*

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- Globalisation and Comparative Studies
- Innovation, Governance and Policy
- Democracy, Politics and Journalism Ethics
- Media and Identity
- Media and New Media Literacies
- The Cultural Economy

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- 150-200 word abstract
- Headings and sub-headings are encouraged
- The Harvard system of referencing should be used!
- Papers should be prepared as a Word file.
- Graphs, pictures and tables should be included as appropriate in the same file as the paper.
- The paper should be sent by email to:

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