What are the latest research findings on children’s online risks and opportunities? How are these being used to inform improvements in policy and practice around the world? Is this enough to ensure children’s rights and resilience in a digital world?

In this article I will draw on the Global Kids Online (GKO) project – an international research collaboration between the London School of Economics and Political Science (LSE) and the UNICEF Office of Research-Innocenti, with the EU Kids Online network and in collaboration with multiple partners around the world.1 I’ll end by putting these efforts into the wider context of children’s rights in relation to the digital environment, to note the pressing gap between what’s happening and what’s needed.

RESEARCH TO INFORM POLICY AND PRACTICE

The GKO project contributes to a growing global effort to investigate children’s online experiences and outcomes and so to influence policy and practice. In the past decade we’ve seen the debate gradually shifting, maturing even, to become less panicky (we’re quicker to spot moral panics and head off top-down, heavy-handed or short-sighted responses) and more focused on child rights insofar as early calls to protect children by restricting their online freedoms are morphing into more emphasis on educational initiatives combined with growing calls for internet governance. Perhaps, too, the debate is more informed by evidence.

But the research effort faces struggles of resources, collaboration, measurement, ethics and comparability. And policymakers and practitioners are not always convinced of the value of research or clear how to act on it. Meanwhile they face struggles of capacity, complexity, coordination and effectiveness. Often the feeling is of disempowerment or even despair. And researchers are not always sure how to contribute or to be heard.

Moreover, while the global North shifts its discourse and approach, the global South is increasingly getting online and facing both familiar and new challenges, sometimes repeating old mistakes, or succumbing to the convenient belief that what has worked in the US or Europe will work in Africa or Asia; and sometimes finding ways both to respect the importance of local and national contexts while also collaborating internationally in ways that amplify collective efforts.

Remember that only 1 in 10 of the world’s children live in the global North, where children are a small (if important) minority of the population.2 But in many countries they are up to 50% of the population and, globally, some 1 in 3 of the internet-using population. So the future of the internet is in the global South and the proportion of global internet users aged under 18 is rising. That means it is time for international policy discussion to recognise that in the global South, community values and practices are important in diverse ways that may differ from in the global North.3

Internet access is often “mobile first” or “mobile only”, so it’s time to move on from talk of where to put the family computer or how to filter its content. In the global South, also, internet regulation may be weak, schools not well-resourced or available to all, parents greatly preoccupied with other matters, if present at all, and children may be simultaneously marginalised/not heard and yet crucial to a family’s livelihood and prospects.4

DIVERSE COUNTRIES, CONTEXTS AND METHODS

Given this context, the GKO network has sought ways to generate rigorous and comparable quantitative research combined with survey adaptations and qualitative investigations that explore diverse country contexts.5 The network has now grown to 17 countries, with more than 20,000 children surveyed since 2016. Together with our partners in the EU Kids Online network,6 which created the foundation for the GKO methodology and later applied it in their 2018-19 surveys, we have surveyed close to 40,000 internet-using children in more than 35 countries using a comparable methodology.7

Unlike most studies, which focus either on the risks (such as bullying or grooming) or the opportunities (such as learning or creativity), GKO asks two overarching research questions, designed...

There is no more important concern in the global digital community than the wellbeing of children. SONIA LIVINGSTONE, who leads the Global Kids Online project, presents the latest evidence for a holistic approach for the digital age.

ARE THE KIDS ALRIGHT?
to keep the risks and opportunities of the digital world firmly in balance:

- When and how does use of the internet (and associated online, digital and networked technologies) contribute positively to children’s lives, providing opportunities to benefit in diverse ways that contribute to their wellbeing?
- When and how is use of the internet (and associated online, digital and networked technologies) problematic in children’s lives – amplifying the risk of harms that may undermine their wellbeing?

One interesting result of our dual approach is that we can shed light on the intersections between the answers – the risky opportunities (such as sexting or peer drama or making new friends online) – and we can reveal some of the trade-offs facing policymakers (such as the way that greater digital skills are linked not just to more opportunities but also to more risky encounters).

To answer these questions, we must recognise that there are multiple influences on child wellbeing. So although the public debate often favours a simple world in which internet use is either beneficial or – the media’s favourite story – unilaterally harmful, social science has never found support for single causes of significant outcomes. Since we must face the complexity of a multifactor, multilevel world, research answers will always be qualified and contextual.

We have just analysed data from 14,733 children aged 9-17 who use the internet, surveyed using the GKO methodology together with one of their parents in 11 high, upper-middle and lower-middle income countries across four different regions. What follows are the highlights of seven themes.

1 **Access to connected devices is unequal.**

GKO asked children if they used a mobile phone, desktop, laptop, tablet, games console or television to go online. Mobile was by far the most common way for children to go online in all countries, marking quite a change over the past decade:

- Boys have access to slightly more devices in most countries, but still gender differences are fairly small
- Age differences are also fairly modest in most countries, though for younger children access is less often via mobile and more often via another (more shareable) device
- In terms of time use, again gender differences are minor and age differences are more marked (more time spent for older children).

These findings raise questions about whether the type of device matters, whether the gender divide is over, and whether differences by age reflect a problematic inequality.

2 **Locating use – home more than school.**

The conditions of access matter to the quality of children’s experiences and the potential for adult mediation. Country GNI (GDP per capita) affects children’s access at both home and school. In addition:

- In all countries, home is the most common place for children of all ages to access the internet
- In all countries, older children use the internet more than younger children. The difference between home and school access is greatest for younger children (9-11) whose access at school is particularly limited. This invites a debate about whether younger children’s lesser access is positive or limiting.
The implication is that parents could be crucial to mediating their children’s online opportunities and risks – in many parts of the world, relying on schools will not reach so many children, especially younger ones. But of course parents can be hard to reach.

While gender differences are generally minor, it should be remembered that the population is internet-using children, and this may not capture gender differences in who has access in the first place. When it comes to measuring online activities, gender differences are more noteworthy, with boys doing a wider range of activities – especially in poorer countries.

**3 Digital skills play a mediating role.** In the GKO model, digital skills play a key mediating role. In other words, we examine both the factors that facilitate the development of skills and the likely effects of skills on children’s wellbeing in the digital environment:

- Most children claim good information skills (e.g. I find it easy to choose the best keywords for online search)
- Most also claim good privacy skills (e.g. I know how to change my privacy settings)
- Fewer claim critical skills (e.g. I find it easy to check if information online is true)
- Children’s digital skills are higher in wealthier countries and among older children, with fewer gender differences – and note that, since all the children surveyed are internet users, the lower skills found in poorer countries and among younger children helps to pinpoint where educational input is most needed
- Statistical analysis shows further that children who do a wider range of activities online, and who receive more enabling mediation and less restrictive mediation from their parents, tend to have better digital skills.

**4 Climbing the ladder of online participation.** We asked children about lots of different kinds of activities – information-seeking, creative, entertaining, participatory. Then we looked for patterns among the activities, finding what we conceived of as a ladder of online participation. The idea of the ladder reflects the findings that:

- While many children enjoy some of the more straightforward (arguably, one-to-many) opportunities of internet access, fewer undertake the (arguably, more advanced, or some-to-some) civic, informational and creative activities online held out to be significant opportunities of the digital age
- The steps of the ladder – which vary a little in content across countries – were formed by simply ranking the activities by how many children do them, and then colouring the activities undertaken by at least half of each age cohort
- This suggests that the activities most often practised across the age range (e.g. playing online games or watching YouTube) serve as an early entry point, possibly even a gateway, to the activities practised more rarely – even by the oldest teenagers.

Children’s online activities lie at the heart of the GKO model – they are to be explained, for they are of value in and of themselves, and they may have consequences for children’s overall wellbeing, whether facilitating benefits or mediating or mitigating harm. Statistical analysis suggests that not only do older children do more online but also more access is linked to more activities; the more children do of one activity, the more they do of the others and, perhaps most tellingly, the less their parents restrict their digital activities, the more they do – including more creative activities.

We use the idea of a ladder not to propose a single or normative pathway, for of course children have diverse interests and may pursue many directions online, but to ask policymakers and practitioners what goals they have for children. Is it sufficient if so few undertake civic or creative activities? Should society do more to enable certain online pathways? How should advice to parents be amended, since restrictive mediation in the interests of safety is also limiting children’s online participation?

**5 Online risks vary by country.** Although GKO research supports the idea that internet access brings both opportunities and risks, such that the risks pose a challenge for those seeking to promote opportunities, while efforts to minimise risk too often also limit opportunities, the research gains most attention in its findings regarding risks. The survey asked about a wide range of risks that children may have encountered in the previous year, including:

- Seeing content related to self-harm – less than 20% overall, with age differences in all countries, and with gender differences raising the proportions for girls in Chile (20% vs 10% boys) and Uruguay (27% girls vs 17% boys)
- Seeing content related to suicide – similar findings as for self-harm, though fewer age differences perhaps due to low proportions overall
- Encountering hate speech online – 40% saw this in Albania, Bulgaria and Uruguay, dropping to just 10% in Ghana and the Philippines – and generally more such encounters were among older teens
- Seeing violent content – the findings are similar to those of hate speech, but there are gender differences (boys see more in some countries, girls in others)
- Seeing sexual content – across different media, including online, between 20% and 40% of children report this, with boys reporting more exposure in some countries and teenagers reporting more in all countries
- Being treated in a hurtful way is reported by between 10% and 30%, depending on the country, with no notable gender differences and weak age differences
- Meeting someone face-to-face who you got to know online – here the figures are again low: less than 25% in all countries, less than 10% in several. This is reported more by boys and older teenagers. Importantly, our follow-up questions reveal that while such meetings can be risky, well over two-thirds of children in most countries reported being happy or neutral as to how the meetings went
As the findings also suggest, overall levels of risk are lower in some countries (Chile, Italy) and higher in others (Uruguay, Bulgaria), albeit with specific risks being higher or lower in different countries, hinting at distinct risk cultures yet to be understood.

6 From risk to harm – a complex pathway. Building on EU Kids Online research, we distinguished risk from harm insofar as the former is a matter of probability – going online, like crossing the road, can be risky, especially if the people one meets are abusive and the space isn’t well regulated. But one might not come to harm, nonetheless, especially if careful, protected or just lucky. So harm – being not a probability but an actuality, must be measured separately. However, harm can be tricky to determine, depends on multiple factors, and may take time to show.13

After much debate, we decided that our surveys could really only ask the child whether anything ever happened online that bothered or upset them in some way. There could be more reliable measures, perhaps, but not when surveying the child directly, a method which brings other advantages. We found:

- Between 10% (Italy) and 25% (Chile) of children reported such an experience. More girls in Chile and fewer in Ghana also reported such upset, but otherwise there were few gender differences, though in most countries, older teenagers reported more upset than younger children.
- Statistical analysis revealed, unsurprisingly, that those who encountered online risk were more likely to say something bothered or upset them online, but the relation is not a perfect one: so, some children encounter risk but do not report being upset. The factors that make some more resilient and others more vulnerable need to be better understood.

Returning to our model, we can say that, looking across individuals within a country:

- Digital skills and online activities (opportunities and risks) all increase as children get older.
- Exposure to more risks makes children more likely to experience harm, and greater digital skills are not, so far as we can say from our cross-sectional data, linked to reduced harm.

7 Enabling vs restrictive parenting practices. Parents are first in line to support children to maximise their online opportunities and minimise the risks. Building on prior research, we distinguish enabling (encouraging, discussing, guiding) and restrictive (making rules, setting limits, banning certain activities) parental mediation.12 Girls generally receive a bit more enabling mediation; younger children receive more of both. Enabling and restrictive mediation are logically independent, with several country clusters evident:

- Enabling mediation is highest in Chile and Uruguay, and lowest in Ghana, the Philippines and South Africa.
- Restrictive mediation is highest in South Africa, and lowest in Albania, Montenegro and Bulgaria.

Statistical analysis within countries suggests that enabling mediation by parents is linked to greater digital skills among children in all countries, while such mediation slightly reduces their exposure to online risks in all countries except Ghana and the Philippines. However, looking across countries, we also see that countries with more restrictive parenting (the less wealthy countries in our study) tend to have children who encounter fewer risks and fewer opportunities. Clearly, the country context in our model is important in shaping the actions of parents and children. That means that, beyond parents, many other actors have a key role to play.

TOWARDS EVIDENCE-BASED POLICY

GKO has worked with diverse national and international stakeholders from the outset. Alongside the research toolkit we have also built an “impact” toolkit.13 By “impact” we mean the demonstrable benefit that the research can contribute by helping to realise children’s rights and benefit their wellbeing in relation to the digital environment. It must be recognised that the path from evidence generation to ultimate societal or economic impact is unpredictable, usually involves a substantial time-lag and is fraught with methodological challenges in terms of identifying cause and effect. While long-term impact may be difficult to capture within the lifespan of many research programmes, we believe that it is possible to capture intermediate outcomes or “pathways to impact” that signpost plausible longer-term impacts.

This year GKO commissioned an independent agency to investigate and evaluate the impact of its research.14 This agency theorises the pathways to impact, identifying the risks and assumptions involved, and deploying a comprehensive methodology of inquiry. It identified a series of international impacts on multistakeholder and UN organisations. Although tending to be discursive or advisory, they can reach beyond the countries where GKO has worked directly. More concrete impacts were also identified at country level (see panel overleaf).

REFLECTING ON IMPACT – ACHIEVED AND IDEAL

The evaluation of GKO impact revealed observations that could be helpful also for others’ efforts to advance evidence-based policy. These included:

- Strengths of the GKO network: a dedicated core team; recognised quality of the research and engagement; establishing an inclusive approach and a dynamic peer learning community; a visible presence at key stakeholder events; striking a balance between cross-national comparability and local adaptation to context; the focus on child rights.
- Risks faced by the project: a reliance on individual champions in each country; countries join when they are interested or have the funds rather than...
Child is currently producing a definitive statement approach, the UN Committee on the Rights of the Child. This facilitates a move away from protection and justice officers. The programme was assigned resources by the government to provide training for teachers, and for child protection and justice officers.

**Bulgaria** – the Ministry of Education and Science changed its policy discourse from technical skills to digital literacy, and has integrated an hour of media education per year for all young people. Some teachers have redesigned their approach around digital participation, including reworking the curriculum and classroom design. Further, children’s online safety standards are now included in a draft national strategy for child protection.

**Ghana** – the Ministry of Gender, Children and Social Protection used GKO findings in arguing for the inclusion of child online protection in the revision of Ghana’s Children’s Act. Also, a child online protection module was added to a community engagement toolkit used at regional, district and community levels to sensitise children and parents to child protection issues. Further, a component on child online safety has been added to a Ghana wide campaign – Ghanais Against Child Abuse. Last, the National Cyber Security Centre added a fourth “pillar” on children to its priorities.

**Montenegro** – building on GKO findings relating to 9-11 year olds, the UNICEF office developed a learning toolkit app and is now working with the education ministry to support its use in IT classes. Further, GKO questions were applied to assess teachers’ digital literacy for the first time, and the education ministry will identify teachers’ need for support.

**The Philippines** – the education department is using GKO findings to justify the curriculum integration of life skills, digital skills and digital wellness modules for younger children.

**South Africa** – GKO research influenced the country’s communication regulator to require service providers to reduce data costs, based on the finding that costs are a barrier to children’s opportunities online.

**Uruguay** – GKO research has informed a public awareness campaign on internet security. Teachers co-produced interventions with GKO researchers and are sharing these with other professionals. Parents have been engaged in discussions of the research, and guidance for parents has been produced, with a parent support programme in progress.

**Argentina** – based on GKO input from the perspective of children’s rights, a recommendation to promote digital literacy was included in a new convergent communications law which will change the regulation of telecoms services. Further, adolescents were provided with training in Buenos Aires through the creation of a digital citizenship programme. This grew to become an intersectoral policy from the ministries responsible for children and justice. The programme was assigned resources by the government to provide training for teachers, and for child protection and justice officers.

**GLOBAL SNAPSHOT OF GKO INFLUENCE**

- **Argentina** – based on GKO input from the perspective of children’s rights, a recommendation to promote digital literacy was included in a new convergent communications law which will change the regulation of telecoms services. Further, adolescents were provided with training in Buenos Aires through the creation of a digital citizenship programme. This grew to become an intersectoral policy from the ministries responsible for children and justice. The programme was assigned resources by the government to provide training for teachers, and for child protection and justice officers.

- **Bulgaria** – the Ministry of Education and Science changed its policy discourse from technical skills to digital literacy, and has integrated an hour of media education per year for all young people. Some teachers have redesigned their approach around digital participation, including reworking the curriculum and classroom design. Further, children’s online safety standards are now included in a draft national strategy for child protection.

- **Ghana** – the Ministry of Gender, Children and Social Protection used GKO findings in arguing for the inclusion of child online protection in the revision of Ghana’s Children’s Act. Also, a child online protection module was added to a community engagement toolkit used at regional, district and community levels to sensitise children and parents to child protection issues. Further, a component on child online safety has been added to a Ghana wide campaign – Ghanais Against Child Abuse. Last, the National Cyber Security Centre added a fourth “pillar” on children to its priorities.

- **Montenegro** – building on GKO findings relating to 9-11 year olds, the UNICEF office developed a learning toolkit app and is now working with the education ministry to support its use in IT classes. Further, GKO questions were applied to assess teachers’ digital literacy for the first time, and the education ministry will identify teachers’ need for support.

- **The Philippines** – the education department is using GKO findings to justify the curriculum integration of life skills, digital skills and digital wellness modules for younger children.

- **South Africa** – GKO research influenced the country’s communication regulator to require service providers to reduce data costs, based on the finding that costs are a barrier to children’s opportunities online.

- **Uruguay** – GKO research has informed a public awareness campaign on internet security. Teachers co-produced interventions with GKO researchers and are sharing these with other professionals. Parents have been engaged in discussions of the research, and guidance for parents has been produced, with a parent support programme in progress.

**SONIA LIVINGSTONE** is professor of social psychology in the Department of Media and Communications at the London School of Economics and Political Science, and project leader of Global Kids Online with the UNICEF Office of Research-Innocenti.

---

**REFERENCES**


6. See the GKO research toolkit at globalkidsonline.net/tools. For members of the GKO network see globalkidsonline.net/countries

7. See the GKO research toolkit at globalkidsonline.net/tools. For members of the GKO network see globalkidsonline.net/countries

8. See globalkidsonline.net/framework. See also globalkidsonline.net/countries

9. These countries are: Albania, Argentina, Bulgaria, Brazil, Chile, Ghana, Italy, Montenegro, the Philippines, Uruguay and South Africa. For country reports, see globalkidsonline.net/countries. The research was conducted between 2016 and 2018. For more on methodology, see globalkidsonline.net/tools. Findings presented at a Safety10 conference. For reports, see globalkidsonline.net/results


12. See globalkidsonline.net/results and globalkidsonline.net/countries

13. See globalkidsonline.net/results and globalkidsonline.net/countries

14. See the GKO research toolkit at globalkidsonline.net/tools. Findings presented at a Safety10 conference. For reports, see globalkidsonline.net/results.

15. For the 47 member states of the Council of Europe, its recent recommendation on guidelines to respect, protect and fulfil the rights of the child in the digital environment meets this challenge in a concise and comprehensive way. For a truly global approach, the UN Committee on the Rights of the Child is currently producing a definitive statement – drawing on consultations with both experts and children around the world. This will not be straightforward, of course, and it should help all concerned frame and respond to the pressing demands on research, policy and practice indicated in this article and, more profoundly, address the genuine potential and actual difficulties facing child wellbeing and child rights in a rapidly unfolding digital world.

---

**1.** Having a prior plan; insufficient core funding impedes regular networking opportunities; it is expensive to keep updating the findings; impact may take a long time to unfold.

**2.** Although the GKO model provides coherence in terms of the theorisation of child wellbeing in the digital age, this scattergun set of impacts is somewhat dizzying. One can see that, in one country or another, the various stakeholders are addressed (education, parenting, law enforcement, industry, welfare) but not all stakeholders in each country. Beyond this, how are we to judge whether the changes are sufficient, meeting the priorities in a country and not leaving crucial gaps?

**3.** For this we need not a theoretical but a normative account of child wellbeing in the digital age. Hence GKO, like an increasing number of its partners and stakeholders, has adopted a child rights framework based on the UN Convention on the Rights of the Child. This facilitates a move away from protection pure and simple and towards a holistic approach which prioritises rights of protection, provision and participation, and centres on the child’s experience, agency and life contexts. Translating this into the digital context is now the pressing challenge facing research, policy and practice.

**4.** For the 47 member states of the Council of Europe, its recent recommendation on guidelines to respect, protect and fulfil the rights of the child in the digital environment meets this challenge in a concise and comprehensive way. For a truly global approach, the UN Committee on the Rights of the Child is currently producing a definitive statement – drawing on consultations with both experts and children around the world. This will not be straightforward, of course, and it should help all concerned frame and respond to the pressing demands on research, policy and practice indicated in this article and, more profoundly, address the genuine potential and actual difficulties facing child wellbeing and child rights in a rapidly unfolding digital world.