
Our Rights in the Digital World

A Report on the Children's Consultations
to inform UNCRC General Comment 25



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About 5Rights Foundation

5Rights Foundation was invited by the UN Committee on the Rights of the Child to be the consultants on General Comment 25. The drafting of the general comment was supported by a steering group, chaired by 5Rights and led by lead author Professor Sonia Livingstone.

5Rights Foundation develops new policy, creates innovative projects and challenges received narratives to ensure governments, the tech sector and society understand, recognise and prioritise children's needs and rights in the digital world. Our work is pragmatic and implementable, allowing us to work with governments, intergovernmental institutions, professional associations, academics, and young people across the globe to build the digital world that young people deserve.

5rightsfoundation.com

About the Young and Resilient Research Centre at Western Sydney University

The Young and Resilient Research Centre in the Institute for Culture and Society at Western Sydney University, Australia, embraces user-centred, participatory and collaborative methods to research and develop technology-based products, services and policies that strengthen the resilience of children, young people and their communities, enabling them to live well and participate fully in social and economic life.

The Centre is deeply committed to supporting children to realise their rights in relation to the digital environment. In partnership with child-facing organisations around the world, the Centre has led a series of cross-national consultations with children in over 70 countries to channel their insights and experiences into the decision-making that impacts their everyday lives in the digital age.

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Preface

In March 2021 General Comment 25 on children’s rights in relation to the digital environment was adopted by the UN Committee on the Rights of the Child. This authoritative document set out for the first time that children’s rights apply equally online and offline, its 10,700 words offers a comprehensive vision for how states should interpret children’s rights in relation to the digital world.

The 5Rights Steering Group took advice from experts in 27 countries, led two consultations, and worked with the UNCRC General Comment 25 Working Group to draft the final text. But perhaps more than any other stakeholder group we were concerned about the views of children themselves. This report is the result of an international consultation undertaken by Professor Amanda Third and Lilly Moody from the Young and Resilient Research Centre at Western Sydney University, on behalf of the 5Rights Foundation. The voices of the children are variously thoughtful, powerful, demanding, occasionally humorous but in summary they demand access to a digital world that is more affordable, fair, safe and rights respecting. Their views guided the drafting of the general comment and will resonate around the globe as nation states begin to implement the duties that it has so clearly set out.

The culture and practice of the digital world is increasingly inseparable from any other aspect of their childhood. Our thanks go to the UN Committee on the Rights of the Child for their leadership, in particular, the three Working Group coordinators Olga Khazova, Amal Aldoseri, and Philip Jaffé; to those who are part of or have supported the 5Rights Steering Group along this three-year journey; to the team at Western Sydney University for undertaking this important piece of work and to each of the 27 partner organisations that ran workshops.

Above all, our thanks go to the children and young people who participated in the consultation: your views form part of General Comment 25, which will help build the digital world that young people deserve.

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Chair, 5Rights Foundation

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Overwhelmingly, children are passionately keen to be part of the digital world, but they are frustrated by its faults and feel it should serve them better.

Access

Children believe that the digital environment is critical to realising their rights in the contemporary world. They call on governments and technology providers to enable all children, regardless of their socio-economic status, gender, ability or geography, to have regular and reliable access to digital technology and connectivity.

Information

Children see digital technologies as fundamental to their right to access information and participate in society as educated and informed citizens. They call on States and other duty bearers to ensure they have, trusted and truthful information in their language, and transparent and child-friendly information about how digital services work.

Expression, Identity, Assembly and Association

Children want to engage in digital spaces without fear of undue criticism, harassment, discrimination or aggression so they can express themselves, advocate on issues they care about, assert their identities and actively participate online.

Play

Children want their parents and other significant adults to acknowledge the joy, relaxation, and learning they derive from their digital play experiences and to afford them greater autonomy and responsibility in balancing their right to play with other rights.

Privacy

Children are demanding more information about how their data is collected, stored and used, greater protection of their privacy, and less surveillance by commercial entities and parents.

Health

Children call for access to confidential, child-centred and evidence-based digital services and trustworthy sources of health information, particularly on taboo or sensitive topics.

Family

Children are calling on parents and carers to afford them greater trust and autonomy to use digital technologies responsibly; to be better informed about the benefits and harms relating to digital technologies; to develop their own digital literacies; and to role model appropriate technology use for children.

Violence and Exploitation

Children want services that are designed to protect them from predators and abuse, and action to prevent and remedy discriminatory or aggressive behaviour, as well as forms of economic exploitation.

The most widely ratified human rights treaty in history, the UNCRC is a legally binding instrument, and the foundation for global action on children's rights. It was ratified in 1989, well before the widespread uptake of digital technology that shapes growing numbers of children's everyday lives today.

General Comment 25 provides practical advice about how to achieve the necessary balance between children's provision, protection and participation rights. For the millions of children around the world who have regular and reliable access to digital technology and the internet, and for the many who will come online for the first time in the near future,¹ General Comment 25 is thus a crucial step in ensuring their rights will be respected, protected and fulfilled.

The path to the adoption of General Comment 25 traces back to at least 2014, when the UN Committee on the Rights of the Child (UN Committee) asserted the importance of addressing children's rights in relation to the digital environment by holding a Day of General Discussion on Children and Digital Media.² In 2017, the Children's Commissioner for England commissioned a *Case for a UNCRC General Comment on Children's Rights and Digital Media*.³ With representations led by child rights activist,

Gerison Lansdown, the proposal was endorsed by the UN Committee in early 2018, and the UN Committee appointed 5Rights Foundation as its consultants in the process of drafting General Comment 25.

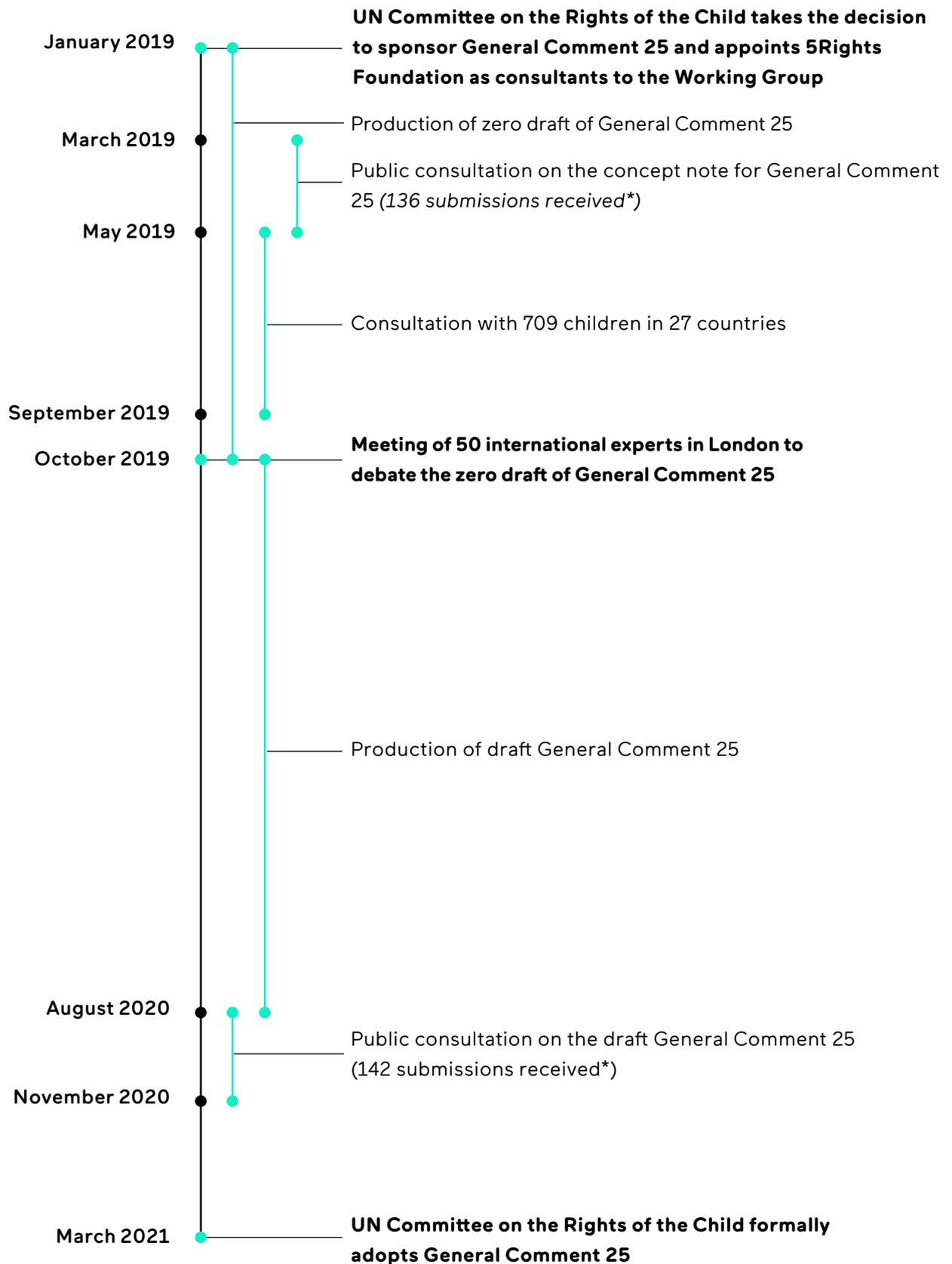
In an effort to activate children's right to participate in the decision making that impacts their lives⁴ and ensure that General Comment 25 responds to their experiences, the drafting process was driven by an extensive consultation with children, led by the Young and Resilient Research Centre (Y&R) at Western Sydney University.

This report documents the insights of the 709 children and young people aged 9–22 years old in 27 countries on six continents, who contributed to the consultations to inform General Comment 25.

- 1 Livingstone, S, Byrne, J & Carr, J (2016). 'One in Three: Internet Governance and Children's Rights', *Innocenti Discussion Papers No. 2016-01* (Florence: UNICEF Office of Research – Innocenti).
- 2 United Nations Committee on the Rights of the Child (UNCRC) (2014). *Report of the 2014 Day of General Discussion: Digital media and children's rights* (Geneva, Switzerland: Office of the High Commissioner of Human Rights).
- 3 Livingstone, S, Lansdown, G & Third, A (2017). *The case for a UNCRC General Comment on Children's Rights and Digital Media: A report prepared for the Office of the Children's Commissioner of England* (London: LSE Consulting).
- 4 United Nations General Assembly, 'Convention on the Rights of the Child', *United Nations: Treaty Series*, vol. 1577 (20 November 1989), 3.

Figure 1.2:

Timeline of key events in the drafting of General Comment 25



1

Findings from the consultation with the children

The potential impacts of digital technology on children’s rights – whether by design or unintentional, whether positive or negative – are significant. Crucially, children’s rights are indivisible and inter-dependent and all have equal status. Also, a balance must be struck between safeguarding children’s individual rights and promoting collective benefit.

So too, children’s rights must be asserted within the broader context of human – which tend to be configured primarily as ‘adult’ – rights.⁷ Recognising and recommending how to acknowledge and address these tensions in relation to the digital environment constituted a key focus in drafting General Comment 25.

The children’s consultation opened with a discussion of the extent to which children consider access to digital technology and connectivity as necessary to realising their rights in the contemporary world.

Children believe that digital technology is critical for realising their rights in the contemporary world, and many see digital access and use as basic needs.

As in previous consultations,⁸ regardless of their level of access or the frequency of their use (see ‘Access’), the vast majority of children saw digital technology as increasingly fundamental to their everyday lives, and vital to their realisation of their rights. Implicitly acknowledging the indivisibility of their rights, children highlighted that digital technology enhances their multiple, intertwined rights simultaneously: for

example, to education, information and freedom of expression (see ‘Education’, ‘Information’, ‘Expression’).

Children particularly value how digital technology and connectivity enable them to access a wide variety of resources from which they learn about diverse ideas, people and ways of life, as they grow. They highlighted that digital technology plays a critical role in their developing sense of identity, their education and employment opportunities and, more broadly, in strong economies, the appreciation of diversity and social justice outcomes. Indeed, many saw technology as a potential leveller of inequalities, enabling children to enjoy a better life.

Canada, girl, 17: **Having access to digital technology contributes to low employment rates; getting jobs; social justice; reaching out to others internationally; appreciating other cultures/differences.**

Canada, girl, 15: **The digital environment creates equal opportunities; being without it limits quality of life.**

⁷ United Nations (2020). Report of the Secretary General. Roadmap for Digital Cooperation (June 2020).

⁸ Third et al (2014). *Children’s Rights in the Digital Age*; Third et al (2017). *Young and Online*.

Children also reported that digital technology is key to promoting their understanding of their rights (Article 42), enabling them to realise their rights across online and offline settings.

Romania, girl, 16: **It is necessary that youngsters should know their rights, in order to protect them and make use of them. Thanks to the internet and technology, this is more and more possible.**

While children were enthusiastic about how the digital environment can support and sustain their rights, they were nonetheless conscious that digital technology can undermine their capacity to realise their rights. Specifically, they reported being concerned that digital technology can compromise their rights to privacy and expose them to risks of harm that range from psychological and physical violence to exposure to drugs and other negative influences (see 'Violence' and 'Privacy').

As the consultation in Brazil illustrated, because digital is an increasingly prominent feature of everyday life, children tended to see access to the internet as a basic need. Some even asserted that it should constitute a right in itself.

Brazil, boy, age unknown: **To me, the internet is a right. It is the main means of communication today.**

Brazil, girl, age unknown: **More than having access to a desktop or portable computer, I think the central issue is having access to the internet.**

Children noted that some form of access to a digital device is a precondition for engaging with the internet and, therefore, to being able to realise one's rights in the digital age.

Brazil, boy, age unknown: **If you don't have a device to access the internet, the internet as a right is meaningless.**

Brazil, girl, age unknown: **Having your own mobile phone is a desire. Having a device from which you can access the internet should be a right.**

Considering basic access to the internet sufficient, children deemed owning a particular kind of device, such as the latest mobile phone, or multiple devices, as 'nice to have', rather than a basic need.

Brazil, boy, age unknown: **Having a good quality mobile phone is a desire.**

Brazil, girl, age unknown: **You may have the desire to use a portable computer but be able to use a desktop computer. Using a computer...is a right, but [using] a portable [computer]...is a desire.**

In some countries, such as Tanzania, Kenya and Cambodia, over a third of children reported that they share a device with family members. In these contexts, being able to access, rather than to own, an internet-connected device mattered most to children.

Brazil, boy, age unknown: **The question is not about having a portable computer, it is about using it... Your neighbour may have a computer and you can use it. So...having access to a computer is a basic need. You have the need and can use someone else's computer.**

Where they reported that access to a device is a basic need, children said it is most important to have access to a mobile or smartphone, as opposed to other devices.

This is not surprising, given that the vast majority of children consulted – particularly, though not exclusively, those in low-income countries – access the internet primarily via a mobile or smartphone (see 'Access'). They highlighted that mobile or smartphones are a key communication tool in contemporary society and are typically more

versatile than other digital devices.

Brazil, boy, age unknown: **I don't know if having a mobile phone is a basic need or a desire. It may be a basic need because it is the way we communicate nowadays.**

Brazil, boy, age unknown: **If a mobile phone is a basic need, a portable computer is a desire. You don't need both. Having a mobile phone is more important because you can do a lot of things with it. Having a computer can be a desire [because] everything that you do with it can be done on a mobile phone.**

Children from low- and lower- to middle-income countries, such as Ghana, highlighted that meeting their basic needs – such as food, shelter and education – takes precedence over their access to the digital environment, which they tended to see as a luxury available to only a privileged few.

Lastly, some children pointed out that, while they should be able to access the digital environment, they should also have the choice about whether, how and the extent to which they engage with it.

Brazil, girl, age unknown: **Having access to healthy food is a right, but the person can choose whether or not to eat healthy food. It's like the mobile phone: I can say I don't want to have it, but I should have the right to access it if I want to.**

Overall, though cognizant of the ways digital technology can infringe their rights, given that the digital environment is increasingly central to everyday life in the contemporary world, children see access to the internet as vital to achieving their rights. As we discuss in the next section, children are calling on states to secure their access, at a bare minimum, to an internet-enabled mobile phone or smartphone.

The UNCRC makes no specific provision for children to access and use technology of any kind. However, given the increasingly important role of digital technology in the lives of people everywhere, there is a rising call for states, non-government organisations (NGOs) and private entities to enable universal coverage.⁹

Around the world, one in three internet users is a child under the age of 18, and the number of young internet users is growing rapidly.¹⁰ However, despite assertions that children are increasingly among the most connected, large numbers of children around the world struggle to gain meaningful access to the digital environment.¹¹

Even in those countries where children reportedly have regular and reliable access to digital technology and the internet, many still navigate significant barriers to their digital inclusion.¹²

The majority of children consulted reported that constraints on their meaningful access to digital technology and the internet prevent them from harnessing the digital environment in support of their rights. Children are calling on governments and

technology providers internationally to enable all children, regardless of their socio-economic status, gender, ability or geography, to have regular and reliable access to digital technology and connectivity.

⁹ See, for example: United Nations, *Report of the Secretary General. Roadmap for Digital Cooperation*, (June 2020)

¹⁰ Livingstone, Byrne & Carr, 'One in Three: Internet Governance and Children's Rights', *Innocenti Discussion Papers No. 2016-01* (Florence: UNICEF Office of Research – Innocenti), 7

¹¹ Third et al (2014). *Children's Rights in the Digital Age*; Third et al (2017). *Young and Online*; Nyst, C (2017). 'Access to the Internet and Digital Literacy', *Discussion Paper Series: Children's Rights and Business in a Digital World* (June 2017).

¹² Third, A, Livingstone, S & Lansdowne, G (2019). 'Recognising children's rights in relation to digital technologies: Challenges of voice and evidence, principle and practice', in Wagner, B, Kettemann, MC & Vieth, K, eds, *Research Handbook on Human Rights and Digital Technology: Global Politics, Law and International Relations* (Cheltenham, United Kingdom: Edward Elgar Publishing), 376–410.

Children most commonly reported that their first point of access to the internet is via a mobile or smartphone.

While evident in many countries around the world, this is particularly the case in low-income countries. While mobile and smartphones have the potential to enable children affordable and convenient access to the digital environment, research suggests that, compared with desktop or laptop access, mobile use contributes to 'diminished levels of user engagement, content creation and information seeking'¹³ and 'less advantageous and beneficial uses of the internet'.¹⁴

Questions thus remain: does 'mobile first' access to the internet adequately enable children to realise their rights? And to what extent might children's reliance on mobile access in the global South be further reinforcing existing inequalities between countries and entrenching the 'digital exclusion of the most disadvantaged'?¹⁵



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- 13 Van Deursen, AJ & Van Dijk, JA (2019). 'The first-level digital divide shifts from inequalities in physical access to inequalities in material access', *New Media & Society* 21/2, 354-375.
- 14 Mascheroni, G & Ólafsson, K (2016). 'The mobile internet: Access, use, opportunities and divides among European children', *New Media & Society* 18/8, 1657-1679 [1660].
- 15 Ibid; Global Kids Online (2019). *Global Kids Online: Comparative Report* (UNICEF Office of Research – Innocenti).

Key Barriers

The primary barriers to children's digital inclusion are financial. Those in low-income countries in particular, though not exclusively, reported that the costs of devices and data are frequently prohibitive for them and their families. Many children share devices with family members or use old devices – chiefly family members' 'hand-me-downs' – to access the internet. These devices often do not have adequate functionality – for example, limited battery life – constraining the speed and quality of their online engagements.

Children want governments and technology companies to ensure all children have access to digital technology.

Children in low-income countries also highlighted infrastructural barriers to their access, including lack of or unreliable power sources and slow internet speeds, as well as the barriers of poor knowledge, skills and education.

Romania, girl, 16: I have not learned programming because the high school I go to doesn't offer classes where I could learn this.

Lebanon, gender and age unknown : I have not learned website development because there are no teachers or specialists.

Furthermore, children – especially those in low-income countries – frequently raised time constraints as barriers to their regular access to the digital environment; in particular, their obligations to study and to contribute to household chores.

Kenya, boy, 15: I want to use my phone...but I have to study and do some chores.

Children also cited adults' restrictions on their digital practices as an obstacle to meaningful use.

Such restrictions included family rules about when they could use digital technology, with whom, and for what purposes, as well as school rules about their use of technology in the classroom and the playground. It appears that children's parents often prohibit digital technology ownership and/or use on the basis of age considerations.

Kenya, boy, 15: I want to use my phone; I want to use my laptop; but my teacher dislikes when I use my phone when he's teaching.

Kenya, boy, 13: If I ask my mum to buy me a phone, she always tells me that I am too young to use a phone.

In addition to these barriers, which were explored in greater depth in previous consultations,¹⁶ children in this consultation identified a range of other obstacles to their meaningful access to the digital environment: specifically, those relating to language, disability, gender and geographical location. We report on these insights below.

Language barriers

Children who speak languages other than English – including Portuguese, Spanish, and Arabic – highlighted that a lack of digital content in their first language prevents them from benefiting from the digital environment (see also 'Information').

Children in Arabic-speaking countries, such as Egypt and Ethiopia, highlighted that, although their language is spoken by large numbers of people around the world,¹⁷ there is limited age-appropriate content available to them in Arabic.¹⁸ They highlighted an urgent need both to improve translation of English and other foreign language websites into Arabic, and to generate a wider range of content in Arabic for children.

Egypt, gender and age unknown: **The number of the Arabic speaking countries is not low but the Arabic language is not well spread over the internet. The language must be spread more widely through...increasing the Arabic content and improving the translation of websites from the foreign websites.**

Children who spoke minority languages noted that, while there is often limited content available in the languages they speak, their languages are used extensively on social media platforms. This perhaps indicates that social media platforms have an important role to play in nurturing minority language communities.

Portugal, boy, 13: **Criolo [Portuguese Creole], my main language, is never on the internet. This should change. Criolo is only used on Facebook.**

In short, children across the world want governments and technology providers internationally to provide age-appropriate and culturally relevant material in their own languages.

¹⁷ In 2020, after English, Chinese and Spanish, Arabic is the fourth most spoken language globally. It is estimated that 450 million people across generations in 27 countries, primarily in the Middle East and North Africa region, speak Arabic. Of this population, approximately 240 million are internet users, and digital participation increased at a rate of 9,348% between 2000 and 2020 (De Argaez, E [2021]. 'Internet World Users by Language: Top 10 Languages', *Internet World Stats: Usage and Population Statistics*, 20 May 2021, internetworldstats.com/stats7.htm [accessed 22 May 2021]). Despite this, it is estimated that, currently, only 3% of online content is in Arabic (Mustafa, H [2020]. 'Google: Arabic content ranks 8th on the internet', *Al-Arabiya* [1 December 2013], updated 20 May 2020, english.alarabiya.net/en/media/digital/2013/12/01/Google-Arabic-content-ranks-eighth-on-the-internet [accessed 22 May 2021]).

¹⁸ We note here that many websites in English and other languages read left to right and, thus, do not straightforwardly convert to Arabic reading formats. Furthermore, Arabic lexicon, syntax and idiom do not necessarily translate easily into other languages, presenting major challenges for machine translation (Alfahad, ZA & Abd Al-Hasan, JA [2008]. 'Machine Translation of Arabic Verb Sentences into English', *Basrah Journal of Science* 26/1, 25-32).

Language barriers experienced by children with hearing impairments

The digital environment potentially offers children living with disabilities enormous opportunities to connect with peers, access educational and informational resources and opportunities, and develop social and technical skills.¹⁹ Indeed, these children are often held up as exemplary beneficiaries of the digital environment.²⁰ However, they 'are disproportionately disadvantaged in terms of their ability to access and enjoy the benefits of digital technology.'²¹

Children with disabilities face diverse challenges of access, depending on the nature of their disability, including 'visual, hearing, speech, and mobility impairments, as well as psychosocial and intellectual disabilities'. In the children's consultation, children with hearing impairments in Portugal and Tanzania highlighted stark limitations on the audio and audiovisual resources that are available to them in sign languages, for educational, informational and entertainment purposes.

Portugal, girl with hearing impairment, 16:
Língua Gestual Portuguesa, our Portuguese sign language, is not on the internet. This should change.

Tanzania, girl with hearing impairment, 15:
We need to reform social networks to enable children living with disabilities. We need to simplify...the use of the internet in sign language so we, the deaf, can be able to use the digital platforms.

Furthermore, illustrating how children who live with disabilities frequently face intersecting 'societal and cultural barriers to [their digital] participation that bear

on their rights', children with hearing impairments in Portugal described a double constraint at play in relation to language accessibility: neither of the languages in which they communicate – Criolo and Língua Gestual Portuguesa – are well-resourced online.

Portugal, boy with hearing impairment, 13:
Criolo is never on the internet... With Portuguese sign language it is the same thing. There is even less Portuguese sign language on the internet.

These children want governments and technology providers internationally to create easier access for a range of users with different accessibility needs, including providing easy-to-use accessibility tools by default.

Portugal, boy with hearing impairment, 15:
I, like all the deaf community, really want to call the government's and the Prime Minister's attention to explain our problems with accessibility. We try to fight to get the listening community not to see us as nothing and...to listen to the problems of the deaf community.

Portugal, boy, 16: **All sites could use an app to translate what is written or to translate what is spoken on YouTube.**

Children living with disabilities and those from linguistic minorities want accessible platforms, content and devices that meet their diverse needs.

¹⁹ Third, A & Richardson, I (2010). *Connecting, Supporting and Empowering Young People Living with Chronic Illness and Disability: The Livewire Online Community*, report prepared for the Starlight Children's Foundation (Perth: Centre for Everyday Life); Alper, M & Goggin, G (2017). 'Digital technology and rights in the lives of children with disabilities', *New Media & Society* 19/5, 726-740.

²⁰ Alper, M & Goggin, G (2017). 'Digital technology and rights in the lives of children with disabilities'.

²¹ Lundy, L, Byrne, B, Templeton, M & Lansdown, G (2019). *Two Clicks Forward and One Click Back: Report on children with disabilities in the digital environment* (Council of Europe), 10.

²² Alper, M & Goggin, G (2017). 'Digital technology and rights in the lives of children with disabilities'.

²³ Ibid. Alper and Goggin highlight that barriers to the full and proper digital inclusion of children living with disabilities 'may be compounded by intersections with class, caste, race, ethnicity, gender, sexuality, culture, religion, and geography' (727).

Gender as a barrier to access

Around the world, and particularly in low-income countries, girls encounter significant gender-based barriers to their access to the digital environment.²⁴ Children in the consultations highlighted key differences in the ways girls and boys are enabled to use digital technology.

In Jordan, girls said that they do not tend to own their own phones and have limited access to the internet, compared to boys their age. They told us that boys can access the internet in public places, such as internet cafes, which is not seen as appropriate for girls. Furthermore, it appears that girls' families implement tighter restrictions on when, where and with whom they access the internet. Girls perceived these things as forms of gender discrimination and called for full access to the digital environment.

Other children also highlighted how dominant gender values and attitudes appear to curb girls' access to the internet.

Pakistan, girl, age unknown: **People say that girls should avoid using the internet.**

Canada, boy, 12: **Certain people are discriminative and this limits access. For example, the professor doesn't give technology to girls.**

Jordan, workshop facilitator's notes: **Girls seem to have less access to the internet than boys... There is a discrimination in access based on gender... Girls do not actually own their own phone and have limited access to the internet compared to boys, who might access it through the internet cafes that are generally only for boys. It might be also related to restricting girls' access to the internet by family members (parents/husband).**

Indeed, studies show there are 'significant gender gaps in access and use of digital media, as well as in the digital skills and opportunities that girls and women have in comparison to men and sometimes to boys'.²⁵ Research in some parts of the world also suggests that girls are more likely to gain access to the digital environment later than their male counterparts and their digital practices are likely to be more tightly monitored and restricted than those of boys.²⁶ There is significant scope to tackle restrictive gender attitudes and to advocate for girls' rights in relation to the digital environment, thereby supporting their life chances.

Children want more digital content that is age-appropriate and accessible in their first language.

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- ²⁴ International Telecommunications Union (ITU) & United Nations Educational, Scientific and Cultural Organisation (UNESCO) (2013). *Doubling Digital Opportunities*; Raftree, L & Bachan, K (2013). *Integrating Information and Communication Technologies into Communication for Development Strategies to Support and Empower Marginalised Adolescent Girls* (New York: UNICEF); The World Bank (2016). *World development report: Digital dividends* (Washington).
- ²⁵ Livingstone, S, Nandi, A, Banaji, S & Stoilova, M (2017). *Young adolescents and digital media: Uses, risks and opportunities in low- and middle-income countries. A rapid evidence review* (Gender and Adolescence: Global Evidence, GAGE), 9. Livingstone et al (2017). *Young adolescents and digital media*. See also Raftree, L & Bachan, K (2013). *Integrating Information and Communication Technologies*.
- ²⁶ Livingstone et al (2017). *Young adolescents and digital media*. See also Raftree, L & Bachan, K (2013). *Integrating Information and Communication Technologies*.

Limits on access in rural communities

Despite significant trends in migration from rural to urban centres across the globe, 45% of the world's population live in rural areas.²⁷ Children participating in the consultation observed that disparities in access plague rural and regional communities, and that significant numbers of children in these areas cannot routinely and reliably access the digital environment. They highlighted that a lack of robust electricity infrastructure to power devices constrains the rollout of digital networks to rural and remote communities.

Brazil, boy, age unknown: **Some governments even plan to bring the internet to the sertão [a semi-arid region in north eastern Brazil, also referred to as the 'backlands']. First, these regions had no electricity. The government has created projects to provide them with electricity. After years, they are bringing the internet because these regions were not communicating. The same occurs in indigenous villages.**

Even in remote and rural communities where there is reliable electricity, often connectivity is slow or unreliable.

Lebanon, workshop facilitator notes: **There is poor or interrupted connectivity, especially in rural areas... The availability of free access to the internet and good network connectivity would allow children to have expanded access and exposure to...the internet.**

Furthermore, children noted that poverty and geography often intersect in rural and remote communities, limiting families' capacity to secure the financial resources to enable their children to access the digital environment. Children across low-, middle- and high-income contexts collectively

called for governments and technology providers to prioritise the needs of children living in rural and remote areas.

Malaysia, girl, 13: **I am sincerely hoping that the signals in rural areas can be strengthened and the financial problems will be overcome.**

Malaysia, girl, 13: **I wish that children [in rural areas] can enjoy the benefits of the internet just like the others.**

Children across the world want governments and technology providers internationally to resolve the challenges they face of uneven and unequal access. Affordable broadband access is critical to enabling populations in rural and remote communities. However, the high costs of technology installation, in combination with market constraints in rural and remote areas – such as small size markets, illiteracy and poverty – often mean such projects are not considered viable investments.²⁸

These issues can be compounded by unstable political contexts, regulatory barriers, short-termism, and corruption. Nonetheless, while the challenges are complex,²⁹ children's experiences suggest that securing their access to the necessary hardware and connectivity should constitute an urgent priority for both governments and technology providers. At the same time, as children in previous consultations have indicated, governments, technology providers and others must be careful not to raise children's expectations that their access to digital technology and connectivity will improve beyond the capacity of their environments to deliver on those expectations.³⁰

²⁷ United Nations Population Division (UNDP) (2018). *World Urbanisation Prospects: 2018 Revision* (UN Department of Economic and Social Affairs).

²⁸ International Telecommunications Union (ITU) (2020). 'Broadband development and connectivity solutions for rural and remote areas', *ITU-D Study Groups, Question 5/1*.

²⁹ ITU (2020). 'Broadband development and connectivity solutions'.

³⁰ Third et al (2017). *Young and Online*, 82.

Children in Canada had a wide-ranging conversation about access to the digital environment. They were deeply attuned to the ways that existing inequalities between nations are reproduced in and through the digital environment and were concerned about how digital divides might be deepening.

Canada, boy, 12: **Not everyone has the same opportunities to access and use digital technology.**

They highlighted class and economic disparity, uneven development, geographical location, poor infrastructure, gender and other forms of discrimination, parental decision making, and age as the key social, cultural and economic barriers to children's access to the digital environment, both at home and abroad. They also noted that a lack of access to education limits children's access to digital technologies, and their opportunities to develop digital literacy and other relevant skills and knowledge.

Canada, girl, 17: **Uneven development, technology started late; misfortune; government restrictions; censorship... financial inequality, poverty; internet infrastructure...location, e.g. rural, northern /remote, all affect digital engagement.**

Canada, girl, 17: **Lack of access at school; lack of education in software and applications, skills in tech.**

Importantly, children in Canada noted that the economies of power that shape decision making in

different places around the world constrain children's access to the digital environment. Furthermore, they were concerned that decision makers' values translate into restrictive government legislation, such as bans and other forms of censorship.

Canada, boy, 10: **Access can be limited by the values of those who make the rules.**

Canada, girl, 17: **Government bans and censorship limit children's freedom of expression.**

Given children's sensitisation to these issues, the question for policy makers and those organisations seeking to improve children's access to the digital environment is: **How can we address children's understandings of the barriers to meaningful digital access and facilitate their agency in realising the necessary change?**

Access to the world wide web facilitates the rapid exchange of information and ideas, giving children around the world instant access to unprecedented levels of information from both mass media and non-traditional sources. This can have a positive impact on children's development, bringing them greater opportunities to connect with others, express themselves and find valuable information,³¹ which can have far-reaching educational, creative, participatory and recreational benefits.

However, the advent of social media, with its instant and open sharing functions, has allowed misinformation and 'fake news' to spread faster than ever before.³² This phenomenon, along with access and inequality issues, has serious implications for children's right to information³³ and impacts a range of other rights, such as education (Article 28), freedom of expression (Article 13), and freedom of assembly and association (Article 15).

The majority of children celebrated the ways that digital technology makes finding information faster and easier, encouraging them to be informed local and global citizens, opening up educational opportunities, and helping to safeguard other rights.

Brazil, girl, 13: **Access to information has become easier because, where before you had to buy a newspaper or wait for it to air on television, now all you have to do is look up what you want to know on the internet.**

Ethiopia, boy, 18: **Adolescents can access information about the situation of their region and their country from Facebook and television. For instance, the recent coup in the Amhara region was heard through television.**

Norway, girl, 17: **Information is important because it gives youth protection against exploitation. Much of the information can be found online... Access to information is important so you don't get exploited by others.**

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- ³¹ Lievens, E, Livingstone, S, McLaughlin, S, O'Neill, B & Verdoodt, V (2018). 'Children's rights and digital technologies', *International children's rights law*, 487-513.
- ³² Liang, W, Morstatter, F, Carley, KM & Liu, H (2019). 'Misinformation in social media: definition, manipulation, and detection', *ACM SIGKDD Explorations Newsletter* 21, no. 2, 80-90.
- ³³ Livingstone et al (2017). *The case for a UNCRC General Comment*.

How does digital technology support children's right to information?

Ethiopia, group response: **Digital technology helps us to access different essential information, such as information about health issues, new information about social, political, and climate issues, and accidents in different areas in a short amount of time.**

Brazil, boy, 15: **Access to information has become easier, with research sources, news and facts. Therefore, it has changed a lot and for the better in terms of information for education and even leisure and knowledge.**

Brazil, boy, 15: **Currently, the internet is the greatest means of getting information.**

Germany, gender and age unknown: **The right [to information] is influenced by the internet. Most information comes from the internet.**

Brazil, girl, 15: **The internet is a way for people to acquire knowledge and information. For example, it benefits those who do not have access to schools, but have the internet.**

Brazil, boy, 13: **Access to information has become a necessity because with access to information, people can stop being ignorant, thus evolving and ending high rates of criminality.**

Nepal, girl, 14: **The internet makes it easy and convenient for information to flow from one place to another. New information can be obtained easily which saves our time.**

Kenya, group response: **Technology enables people to get updated on activities around the world.**

Ghana, gender and age unknown: **The use of modern internet helps children access information much faster.**

Brazil, girl, 14: **The internet is a very important form of information and communication because it is easy to use and very accessible. But sometimes we forget about other ways of finding information.**

Ghana, gender and age unknown: **One must know what is happening on his planet and in his country. The internet allows that.**

Nepal, boy, 13: **By the means of digital technology we can get the information from all around the world by sitting in the one corner of the room.**

Philippines, girl, age unknown: **We can get most of the information on the internet. It is our right to get access to it and for us to know the news and contemporary issues.**

The full realisation of children’s right to information requires that children have access to information online in languages they speak (see ‘Access’).³⁴ As Table 1.1 shows, overall, children consulted

to inform the General Comment said that they encounter varying levels of difficulty when it comes to accessing different kinds of information online.

Table 1.1: How easily children find information on different topics in their language online (n=40)

Topic	Very difficult	Difficult	Reasonably easy	Easy	Very easy	Did not respond
Information about health	8%	5%	23%	25%	35%	5%
Information about politics	25%	15%	28%	8%	20%	5%
Information about child rights	10%	10%	43%	20%	10%	8%
News stories	8%	10%	33%	20%	28%	3%

Table 1.2: How easily children find information in their language on different platforms (n=40)

Topic	Very difficult	Difficult	Reasonably easy	Easy	Very easy	Did not respond
Entertainment	8%	13%	10%	25%	43%	3%
Education resources	3%	25%	18%	25%	25%	5%
Video sharing platforms	3%	15%	5%	13%	65%	0%
Child-friendly websites	5%	18%	18%	25%	28%	8%

Concerningly, children said that finding information on politics (40%) and children’s rights (20%) is difficult or very difficult to find. By contrast, they find it relatively easy to find health information online in a language they speak. While they reported that there are few education resources (28%) and child-friendly websites (21%) in their language, they find information is particularly accessible in their languages via entertainment sources (e.g. online television) and video sharing platforms (e.g. YouTube).

However, as discussed in ‘Access’, children with hearing impairments and those in Arabic-speaking countries face stark challenges in accessing all forms of information.

Despite the value they place on online information, children are worried that increasing amounts of misinformation online undermines their right to information. Children were unequivocal that, in order to fully realise their right to information, the information they encounter must be true and trustworthy.

Indonesia, girl, 16: **We have the right to get any information from anywhere as long as it is true and reliable.**

Brazil, girl, 14: **Today, it is easy to manipulate the masses using the internet (especially those with fewer resources). True information must be disseminated.**

Philippines, boy, age unknown: **The right to information is...important in the digital age because it helps us to access information easier. But we need to keep in mind that not all information on social media is true and reliable. Wrong information can influence a child and cause her/him harm.**

While they are cautious of false information online, the majority of children felt that discerning between true and false information sources is challenging and they worry they do not always have the digital literacy skills to assist them in critically assessing information online. Children called for more digital literacy education to help them detect misinformation and critically evaluate online information sources (see 'Education').

Indonesia, girl, 14: **As technology grows, we can easily access information. But it's hard to know whether the information is valid or not.**

Brazil, boy, 15: **By accessing the internet, we can get information, but also we have to be careful about fake news.**

Romania, girl, 16: **Adults (institutions, companies, the parents and the teachers etc) should teach children to make the difference between fake news and true news.**

Ghana, gender and age unknown: **Parents and teachers should educate me on the websites that bring fake news or untrustworthy information so that I can know them and always neglect information from them.**

Perhaps due to their awareness of misinformation or their increased exposure to alternative news sources online,³⁵ two thirds of children also expressed a distrust of traditional mass media sources in online environments:

Brazil, girl, 15: **I do not trust...the mass media. The media manipulates us and makes money off us.**

United Kingdom, boy, 16: **I don't trust the mass media: they extort people for money and info.**

Indonesia, girl, 14: **The mass media often bribes and frequently shares hoaxes and hate about the [people] they don't like.**

Ghana, gender and age unknown: **I don't trust mass media...since they are mostly not credible and a portion of them are fraudsters and liars.**

This distrust stemmed from perceptions that the mass media's motives are to manipulate and profit from consumers, and that the media is complicit in disseminating fake news. To illustrate, a 15-year-old girl in the United Kingdom emphatically pointed to a local scandal where a media outlet knowingly published untrue accusations about a well-known football team.

United Kingdom, girl, 15: **The mass media [are] scum. What happened with the Hillsborough fake news... They lie and give people a bad image.**

Jordan, group response: **The mass media contains fake news.**

South Korea, girl, 13: **The mass media can publish fake news concealed as real.**

It appears that, while children have more information available to them today than ever before, they are increasingly distrustful of the information that they do encounter, making it difficult to maximise the benefits of this right.³⁶ Children emphatically called on governments, media and tech companies (e.g. Facebook) to take greater action to monitor, regulate and eliminate fake news sources.

Ethiopia, gender and age unknown: **The government has to take...legal measures against people who disseminate fake news.**

Ghana, gender and age unknown: **I would like the government, technology companies and teachers to stop or help us manage fake news or untrustworthy information online by blocking websites or some information online.**

Russia, boy, 16: **Tech companies should write warnings or [alerts] which appear when a user visits a fake website, that this website contains untrue information.**

Indonesia, girl, 13 & boy, 13: **Hoax and defamation laws should be strengthened to avoid weak laws.**

Children want governments, tech companies and the media to take stronger action against misinformation and fake news online.

When expressing their desire for more truthful and trustworthy information, children also repeatedly

highlighted the terms and conditions of digital services themselves. Many were critical of their opaque nature, and often made a link between poor information online and poor terms of service (see 'Privacy').

Germany, girl, 16: **Generally, it is a gigantic riddle what happens to our data, as it is hidden in complex data protection agreements and legal texts. I would like to obtain clarity about what really happens with my data.**

Canada, boy, 12: **I would change the way we understand the internet. By that I mean that we should make it so anyone can understand it instead of making it so hard and confusing.**

Philippines, girl, age unknown: **I want to be told where the information I enter into websites goes. I also want to know which people have access to that information and can I be sure that they'll keep it private.**

Children across the world welcome the ability to get information from a wide range of sources. They see their right to information as essential to participating in society as educated and fully informed citizens and to protecting themselves from manipulation and other forms of exploitation. Children are determined that they should have access to truthful, trustworthy and diverse information online, regardless of their race, ethnicity, language, or disability. This includes access to transparent information from online services themselves.

They are calling on states and other duty bearers to ensure they have access to high quality information in their language; to regulate media environments more tightly to eliminate sources of fake news; to demand that digital services provide child-friendly information about how their services work; and to provide digital literacy education that empowers children to make critical judgements about the quality and veracity of information online.

36 Lievens E., Livingstone S., McLaughlin S., O'Neill B., Verdoodt V. (2019) Children's Rights and Digital Technologies. In: Kilkelly U., Liefaard T. (eds) International Human Rights of Children. International Human Rights. Springer, Singapore, pp. 487-513

Where they have ready access to digital technologies, children are enthusiastically using them to gather information, form opinions, engage in discussions, create and share content, and broadcast their views and opinions to the world.³⁷ More than at any other time in history, children are being both seen and heard.

And yet, even at this pivotal moment, censorship, online harassment,³⁸ restrictive rules around digital media use,³⁹ and limited digital access and literacy⁴⁰ are preventing children from gaining the full benefits of their right to expression. The consequence of this is not merely that some children are silenced.⁴¹ Freedom of expression facilitates a range of children's other rights and, without it, children are unable to both contest and safeguard these other rights.⁴²

Children in the consultations were attuned to how digital expression lays the foundation for other rights: in particular, identity (Article 8), health (Article 24), assembly and association (Article 15).

New Zealand, boy, 17: **Being able to express yourself [online] is an important part of having an identity.**

Philippines, gender and age unknown: **Expressing ourselves on different social media platforms such as Facebook, Twitter and Instagram...helps prevent depression and makes us face our problems.**

Lebanon, boy, 17: **I use poetry (blogging) for criticising sedition and encouraging solidarity and accepting differences.**

³⁷ Global Kids Online (2019). *Global Kids Online: Comparative Report* (UNICEF Office of Research – Innocenti).

³⁸ United Nations General Assembly (2016). 'Promotion and protection of the right to freedom of expression', *Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression*, A/71/373 (6 September 2016).

³⁹ Nyst, C (2017). 'Freedom of Expression, Association, Access to Information and Participation', *Discussion Paper Series: Children's Rights and Business in a Digital World* (June 2017).

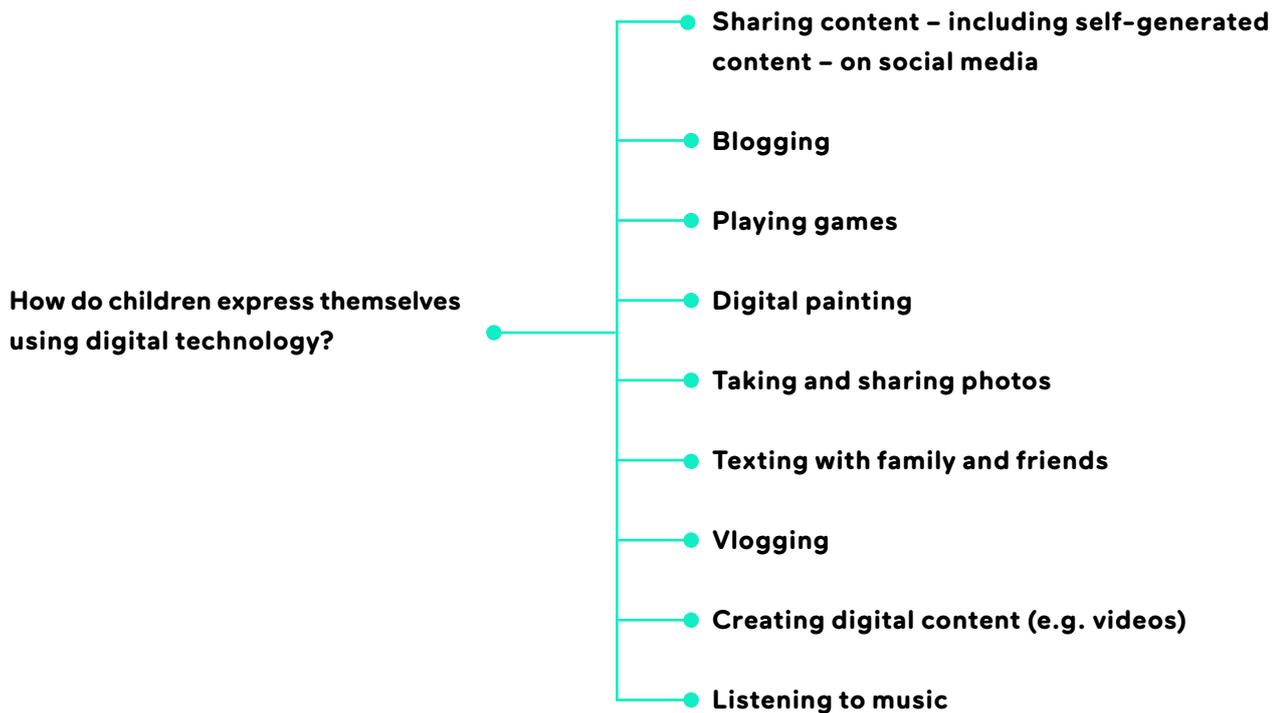
⁴⁰ United Nations Children's Fund (UNICEF) (2017). *The State of the World's Children 2017: Children in a Digital World*.

⁴¹ United Nations Office of the High Commissioner for Human Rights (OHCHR) (2014). 'Statement to the 69th session of the UN General Assembly', *United Nations Human Rights: Office of the High Commissioner, News and Events* (23 October 2014).

⁴² Sawhney, N (2009). 'Voices beyond walls: The role of digital storytelling for empowering marginalized youth in refugee camps', in *Proceedings of the 8th international conference on interaction design and children*, Conference on Interactive Design and Children, June 3-5 2009, Como, Italy, 302-305.

Figure 1.3:

How do children express themselves using digital technology?



Online, children exercise their right to expression by posting on social media, chatting with friends, taking photos, playing games, blogging/vlogging, and creating and sharing music and videos.

Some children said that expressing themselves online empowers them to build their confidence, to find validation, and to share their views and ideas with international audiences.

Philippines, boy, age unknown: **Expressing our opinion is very important and it has a big impact when it comes to the digital age, because in just one click the world can know your opinion.**

By contrast, other children reported that they value the intimacy, safety and privacy of online spaces, which enable them to express themselves to a select group of confidantes.

Nepal, girl, 14: **Many people have inner talents but they feel shy to show it in front of other people. Digital technology has made a platform for these kinds of people, as well as others.**

Canada, girl, 17: **Online I post things I'm interested in. I have a private account for a few friends to see. This is where I share with my close friends what I'm up to but also allow myself to be emotionally vulnerable in ways I wouldn't be with everyone online. I feel safe here.**

New Zealand, boy, 17: **Being able to express yourself [online] is an important part of having an identity.**

Lebanon, boy, 17: **I post online to get 'likes' from people and to prove that I am valued.**

Pakistan, gender and age unknown: **Digital technology allows me to connect with friends and express myself in a safe environment.**

The commercial and public nature of social media platforms raises serious questions about how 'safe' and 'private' these platforms really are.⁴³ Many children are concerned that it is not always clear to them how the data or information they share online is collected, stored or used (see 'Privacy').

Children were acutely aware that the right to expression comes with responsibilities, indicating, in particular, the need to consider the potential impact of their acts of expression on others.

Pakistan, boy, 16: **I take into account minorities and those people who may be personally affected before posting controversial information.**

Norway, group response: **Think before you offend someone's faith, identity or say something hateful. Be cautious: respect that other people have other opinions.**

Indeed, for most children, the right to freedom of expression has limitations: for example, when it is discriminatory; causes harm to others or themselves, now or in the future; impinges on someone else's right to privacy; or puts national security at risk.

Pakistan, gender and age unknown: **Limitations are appropriate when someone's expression is discriminative, harbours inequality and other forms of injustice.**

Philippines, gender and age unknown: **Freedom of expression should be limited when it will result in bullying.**

Canada, boy, 10: **When expressing yourself online, you have to keep in mind not to give away any personal information... Or if you are mad at someone, do not put their name or information online.**

But some children were careful to highlight that constraints on expression are only appropriate if speech acts will cause serious harm.

Canada, girl, 18: **Limits are appropriate if freedom of expression harms someone else. An argument, for example, is a simple difference of opinion: that is freedom of speech and should be left alive. Only when it escalates to...violence and exclusion/ segregation which...divides the world, do people need to be [censored].**

Pakistan, gender and age unknown: **Freedom of speech should not be restricted by the government unless it instigates violence or a threat to society.**

Still others felt that, no matter the circumstances, their freedom of expression should never be curtailed. Or, as one boy in New Zealand argued, limitations may be appropriate offline but online expression should never be censored.

Canada, girl, 14: **Children have every right to express themselves and their opinions on the internet and shouldn't be shut down or silenced.**

Canada, boy, 12: **I don't think you should have restrictions about how you could express yourself because everyone should be able to talk about how they feel about something.**

New Zealand, boy, 17: **While the real world can restrict the way people can express themselves, the digital world should never restrict expression (thoughts, posts about outfits, etc...)**

Children want to be supported to express themselves freely online, without disproportionate limitations or fear of undue criticism or judgement.

Children were evenly divided about whether the adults in their lives supported their freedom of expression online. Some children reported strong support and guidance from their parents or caregivers.

Norway, girl, 16: **My parents show commitment to my online self-expression and think it's cool that youths are engaged.**

Lebanon, girl, 16: **Yes, my parents support me so that I can be psychologically relaxed, and to be expressive...in the community, but in a respectful way.**

However, others highlighted that their parents or caregivers could be dismissive or disapproving of their online expression. They reported that parents and caregivers do not always understand the motivations and pleasures children associate with expressing themselves online, and attributed this to adults' limited exposure to digital technology.

Pakistan, boy, 16: **My parents believe when expressing one's thoughts it should be face to face so true emotions are exchanged.**

Germany, boy, 17: **Adults frequently know nothing about digital technologies.**

Jordan, girl, 17: **Sometimes they support me and sometimes they get angry, because they didn't have this technology in their life when they were growing up.**

Children also noted that parents feared negative consequences stemming from children's online expression.

Lebanon, girl, 17: **They don't support my freedom of expression because they are afraid of harm.**

Pakistan, gender and age unknown: **My parents tell me to express my political view, but not in such a way that I may receive unnecessary backlash.**

Children shared this latter concern. Indeed, set against their very positive views about online expression was an undercurrent about facing discrimination and criticism. Many children highlighted that the internet can foster negativity and disrespect, and this is a disincentive to using digital technology as a tool for self-expression (see also: 'Assembly and Association').

Brazil, girl, 14: **In the digital world, we have a lot of space to express our opinion. However, it is not always received with the due respect that is our right.**

New Zealand, gender and age unknown: **On the internet, we're more susceptible to people judging our thoughts and opinions, which makes it harder for us to have freedom of expression. We tend to suppress our thoughts in order to fit ourselves in a mould in order to not be judged by the internet... This right is often violated due to...the internet.**

Pakistan, boy, 16: **I am affected too much by other people and how they might view me to express myself online.**

Canada, girl, 12: **I'm just too...nervous to voice out my opinion.**

Germany, girl, 18: **I don't express myself out of fear of being bullied.**

For children in the global South, access, language barriers and financial constraints continue to be the most pressing barriers to their freedom of expression in the digital environment (see 'Access').

Ethiopia, boy, 18: A language barrier prevents us from better using internet service for self-expression.

Pakistan, gender and age unknown: We don't express ourselves using digital technologies as much as we would like to...because we don't have smartphones, because of financial constraints.

In sum, children deeply value opportunities to use digital technology to express themselves creatively and politically, and to share who they are and what they believe with the world. These practices empower them to participate as active and informed citizens in the digital age and to develop a deeper understanding of themselves and the world they live in. Children are

deeply aware of and conscientious about the responsibilities that come with self-expression. Their deliberations about their own and other people's safety, wellbeing and privacy powerfully shape their decisions about how they express themselves online. Nonetheless, they don't always feel as though others grant them the same respect. Indeed, they fear negative feedback and sometimes find that the hostility and exposure that can characterise the digital environment are inhibiting. While they agree that limitations on the right to freedom of expression are appropriate when speech acts harm others, they are also careful to point out that these limitations must be proportionate, and must carefully balance children's right to expression with their right to protection and other rights. Ultimately, children want regular and reliable access to digital technologies so that they can express themselves freely in the digital environment, without fear of undue criticism or judgement.



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How do children exercise their freedom of expression with digital technologies?

Ethiopia, group response: **I express myself by posting on Facebook. We share my feelings (happiness, depression, sadness). We have a lot of friends online so we share our emotions for them.**

Lebanon, girl, 16: **I express myself by sharing photos about the truth of something or sadness. It helps for psychological comfort and reassurance.**

Germany, boy, 18: **I use YouTube to assert my views because I want everyone to see [them].**

Philippines, gender and age unknown: **I post on social media about issues on how to protect the children.**

Pakistan, boy, 13: **Blogging – I write about what I'm doing. My life story, so other people can know.**

Canada, girl, 17: **Writing/blogging – I like writing stories, poetry, memoirs and sharing them online for anyone from friends to strangers to read. Having a place to digitally explore my writing motivates me to write more, helps me feel organised, and gets my ideas and stories out in the world.**

Germany, boy, 17: **I express myself by sharing Instagram stories. Some videos and content deal with political content that interests me. It's easy to share a post on Instastory, it reaches my friends and says what I mean.**

Pakistan, gender and age unknown: **Using Microsoft Paint, I express my creativity, because paper is saved.**

Canada, girl, 12: **I express myself by commenting/liking things on Webtoon or... YouTube – because then [you] can talk to others or share and compare your feelings/ideas.**

Canada, girl, 17: **Creating digital media – music/sharing videos; art; creative stuff. As an artist it's good to put your work out there. The society expects an artist to be active online and show off their portfolio.**

Lebanon, boy, 18: **I create digital content, for example like creating videos on YouTube. Maybe sharing a video about the needs of the community, the needs of the citizen and other things.**

Pakistan, gender and age unknown: **By writing posts, I share my point of view regarding feminism because more people will read it as everyone uses social media.**

In one example of the ways in which digital technology supports children’s rights to freedom of assembly and association (Article 15), since 2018, children around the world have been passionately and peacefully taking to the streets to demand government action on climate change.

Inspired by Greta Thunberg’s ‘Fridays for Future’ movement, the ‘School Strike for Climate’ protests have seen millions of children in over 150 countries⁴⁴ exercising their right to freedom of association and assembly in support of a better future for generations to come. Reportedly the largest climate change mobilisation in history,⁴⁵ the mass coordination and global reach of these protests has relied heavily on digital technologies and social media.⁴⁶ These technologies are enabling children to contribute to social change at scale by providing platforms to articulate shared concerns across international borders; and to coordinate, assemble and form associations en masse – and in solidarity – with other children all over the world.⁴⁷ However, uneven levels of digital access and literacy mean that not all children are able to participate in these movements, or to enact their freedoms of association and assembly equally.⁴⁸

Children’s rights to association and assembly intersect. As such, Article 15 protects children’s rights to affiliate in both one-off and ongoing ways with organisations, clubs and other entities

advocating for social, political, religious, cultural or economic change (freedom of association), as well as their rights to convene peacefully – both online and offline – to take action on issues that matter to them (freedom of assembly). The digital environment is becoming ever more fundamental to children realising their rights to association and assembly. Increasingly, social, political, religious, cultural and economic organisations and activities operate online, enabling children, whose physical mobility and capacity to meet with peers is often constrained, to express their views and to participate in collective action. Given the tight restrictions on physical movement during the pandemic, digital means for children to enact their rights to assembly and association have taken on new significance.

Children in these consultations construed this right primarily in terms of social and political engagement, whereas the religious, cultural and economic dimensions featured less prominently in their responses. Those in the global North in particular expressed excitement about the internet as a platform to campaign, lead and participate in

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- ⁴⁴ Fridays for Future’, List of Countries, *Fridays for Future*, <https://fridaysforfuture.org/what-we-do/strike-statistics/list-of-countries/> (accessed 3 March 2021).
- ⁴⁵ 350.org, ‘Officially the biggest climate mobilisation ever’, *350.org*, <https://350.org/officially-the-biggest-climate-mobilisation-ever> (accessed 3 March 2021).
- ⁴⁶ Boulianne, S, Lalancette, M & Ilkiw, D (2020). “School strike 4 climate”: social media and the international youth protest on climate change’, *Media and Communication* 8/2, 208–218.
- ⁴⁷ Third et al (2017). *Young and Online*.
- ⁴⁸ Ibid.

social justice movements, such as Thunberg's 'School Strike for Climate'.

Canada, girl, 18: **Social justice plays a huge role in social change, and the internet is the biggest platform to advocate for social justice. This way everyone has a voice.**

Chile gender and age unknown: **Greta gathered a huge movement through the internet.**

The climate strikes are a powerful example of the way in which digital technologies can inspire, empower and mobilise children to advocate for their rights, challenging perceptions that children are apathetic or not as politically engaged as previous generations. A large number of children in these consultations shared that they express their political views, participate in public groups and forums, and connect with like-minded individuals around shared political interests using digital media platforms.

Canada, boy, 14: **I participate in public debate pages on Instagram. There are lots of topics that you can express your opinion on. It's good to take part and hear other people's opinions.**

Lebanon, boy, 17: **Rap (sharing YouTube videos): I express the needs of the community and the suffering of the citizens and weaknesses of politics, the loose security situation, and the youth's future and feelings.**

Indonesia, girl, 14: **I use online threads to discuss important issues with others.**

Norway, girl, 14: **I share political posts. I reach more people than usually would read things from my political [view] point**

For one child in Canada, being exposed to and connecting with social movements that resonated with her was self-affirming and formative (see 'Identity'):

Canada, girl, 15: **Personal access to social media helped me find [movements] that I really agree with, i.e. feminism (#MeToo) and climate change (Fridays for the Future).**

Too frequently, however, children's use of digital technologies to participate in public life and exercise these rights is trivialised by adults as forms of 'slacktivism'.⁴⁹ Or, in the case of the 'School Strike for Climate' protests, dismissed as irresponsible and jeopardising valuable learning time.⁵⁰ Such framings of children and young people's political organisation and engagement negate opportunities for meaningful participation and fail to recognise the valuable contributions that young people make to social and political discourses via digital means.⁵¹

However, there are vast numbers of children who are unable or who choose not to use digital technologies to exercise their capacity to effect change. Whether they have limited access or limited digital literacy, prefer to spectate over actively participating, or fear receiving negative feedback, retaliation or discrimination for sharing their views online (see 'Expression'), children reported facing many obstacles to fully realising their rights to assembly and association, both online and offline.

Pakistan, gender and age unknown: **I don't take action online mostly due to the amount of negativity, injustice and inequality that is present [online], but I believe it's important to rise above this in order to make a difference.**

Canada, girl, 15: **I don't take much action online – I observe more.**

⁴⁹ Morozov, E (2009). 'The brave new world of slacktivism', *Foreign Policy* (19 May 2009).

⁵⁰ See: Horvat, S (2019). 'The children skipping school aren't ruining the planet – you are', *The Guardian* (7 February 2019).

⁵¹ Cho, A, Byrne, J & Pelter, Z (2020). *Digital civic engagement by young people: Rapid Analysis* (UNICEF Office of Global Insight and Policy, February 2020).

While they experience substantial barriers, children said they want to use digital technology to take action and positively impact the world more than they currently do.

Germany, boy, 16: **I would like to use digital technologies to improve the world, which I don't really do now. I would nonetheless like to do it as it would be something positive and serve the general good.**

Pakistan, girl, 12: **I would like to take more action online.**

Canada, boy, 15: **At the moment I don't make a difference with digital technology, but I would like to have a more positive influence.**

Children want to use digital technologies to contribute meaningfully to their communities and effect positive change in the world.

Children in these consultations recognised the role that digital technologies can play in mobilising youth-led and other social movements, and facilitating children's participation in social, political, cultural, economic and religious discussion and debate. Many children actively use social media and content-sharing platforms to advocate for political, social and other issues they are passionate about and to connect with others who share similar viewpoints. They reported that these experiences can be empowering and formative for their identities.

But, as with other rights, impediments hamper children's full realisation of their rights to freedom of assembly and association in the digital environment. Given the opportunity, however, children expressed a strong desire to harness digital technologies to contribute meaningfully to their communities and effect positive social change in the world. Adults must ensure that these aspirations are nurtured and realised so that the next generation of change-makers can contribute to crafting a more equitable, just and sustainable world for future generations.



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Around the world, forms of leisure and play are evolving and transforming. The digital environment has expanded the forms of play, recreational, cultural and artistic activities available to children. Children are enthusiastically embracing opportunities to take part in these activities, as both creators and consumers.⁵²

Social media, gaming, digital photography, music and TV streaming, and video content creation have captured the attention of children around the world. On one hand, the rapid uptake of these activities has given rise to a concern that the digital environment is contributing to a decline in traditional forms of play – particularly outdoor and physical activities – that negatively impacts children’s physical health and development of social skills.⁵³

On the other hand, digital activities can create plentiful opportunities for children to meet and play with friends, enjoy cultural and artistic life, and access the various other learning and educational benefits of being online.⁵⁴

The children in the consultations were acutely aware of the ways in which their recreation and play are transforming. A boy from Brazil explained how the digital environment has expanded forms of play and changed the way communities think about leisure.

Indeed, it emerged that children, like adults, frequently contrast traditional, outdoor forms of play with digital play, often illustrated through a

contrast between their experiences of childhood (‘now’) and those of their parents (‘back then’).

Brazil, girl, 14: **Nowadays, nobody plays outside any more because of mobile phones.**

Philippines, gender and age unknown: **Nowadays, children are more inclined to use gadgets or machines, so there are [fewer] who play physical games or activities.**

Canada, girl, 17: **I grew...more closed off as digital technology allows me to do more things in my own presence. In my parents’ age, they played together outside.**

Children in an earlier international consultation echoed this tension between outdoor and digital play,⁵⁵ commenting that they would play outside more if they did not have access to digital technologies. However, while a decline in traditional, outdoor forms of play may in part be attributed to increased access to digital technologies,

⁵² United Nations Committee on the Rights of the Child (UNCRC) (2013). ‘General Comment no. 17 on the right of the child to rest, leisure, play, recreational activities, cultural life and the arts (Art. 31)’, *CRC/C/GC/17*.

⁵³ Stephen, C & Plowman, L (2014). ‘Digital Play’, in Brooker, L, Blaise, M & Edwards, S, eds, *Sage Handbook of Play and Learning in Early Childhood* (London: SAGE) 330-341.

⁵⁴ Kafai, YB & Fields, DA (2013). *Connected Play: Tweens in a Virtual World* (Cambridge, Massachusetts: MIT Press); Livingstone et al (2017). *The case for a UNCRC General Comment*.

⁵⁵ Third et al (2014). *Children’s Rights in a Digital Age*.

unfortunately, many children live in locations where crime and violence rates limit outdoor play in public spaces. Moreover, parental fears of 'stranger danger' can also limit children's abilities to take part in outdoor recreational activities.⁵⁶ Thus, equating increased digital play with less time spent outside may oversimplify a complex set of dynamics, as children in this consultation highlighted.

Brazil, girl, age unknown: I think people stopped playing in the street not only because the internet came into being, but because the country and the cities got more violent as well. It may be interesting to evaluate not only the internet, but [also] the environment in which people who use the internet most often are. Certainly, in the countryside, which is safer, teenagers and children use the internet less than we do in the capital.

Contrary to arguments that digital play is bad for children's health and wellbeing, many children in the consultations said that these activities have benefits, pointing to the fun and relaxation they experience when playing online.

Philippines, gender and age unknown: I am playful online. I spend 1-2 hours playing Mobile Legend. It makes me happy and I forget my problems temporarily.

Kenya, girl, 15: I use laptops for entertainment and to make me happy and busy...not bored.

Ghana, girl, 17: Digital play is actually positive because it prevents boredom... The internet makes children happy by making funny videos.

Indeed, digital forms of play were widely celebrated by these children. From television series viewed on online streaming services and real-time video games played on game consoles, to make-up and art

tutorials on video streaming platforms, or mobile games, children were very excited about the wide range of entertainment now available to them online.

Brazil, girl, 14: The internet has brought us a huge diversity of activities for leisure and entertainment.

Aside from games and videos, children also value the ways in which digital technologies enable them to engage with arts and cultural activities, such as listening to music, watching films or making art.

South Korea, girl, 12: [I like it] when artists upload their art videos on YouTube. Someone who likes art can get help through tutorials.

Cambodia, gender and age unknown: I like watching make-up, nail painting, hairstyle [tutorials on YouTube]; and listening to songs in my free time.

Importantly, these activities are not always solitary. For many participants, recreation and leisure were synonymous with socialising with friends, family and others online – whether they play online games together or chat over social media.

Brazil, girl, 14: You can play a game on your mobile phone or a game with friends.

Chile, group response: You can find videos, or you can play online games with your friends.

Russia, girl, 16: Online gaming allows us to play with other players in real-time mode (e.g. Data 2, Counter Strike: Global Offensive).

However, children also noted some of the potential risks of harm associated with excessive digital play.

⁵⁶ Kepper, M, Broyles, S, Scribner, R, Tseng, TS, Zabaleta, J, Griffiths, L & Sothorn, M (2016). 'Parental perceptions of the social environment are inversely related to constraint of adolescents' neighbourhood physical activity', *International journal of environmental research and public health* 13/12, 1266.

Their concerns centred, in particular, on video games. Indeed, concerns about video game addiction were pervasive among the children in this and previous consultations,⁵⁷ reflecting mainstream discourses, which can conflate strong engagement with clinical addiction.

Croatia, girl, 13: **Video games cause social isolation and...are dangerous for children's mental health.**

Lebanon, gender and age unknown: **Video games cause addiction, isolation, and loneliness.**

Because of these same concerns, parents often restrict children's online or digital recreational activities within the home. Children shared that rules imposed by their parents limit the amount of time they are allowed to spend playing games each day, or the types of games they are able to play, and with whom. Often, these restrictions are grounded in parents' concern to balance leisure and play with other rights, such as education and health.

Pakistan, gender and age unknown: **I am not allowed to install the games I want to play.**

Croatia, gender and age unknown: **I am not allowed to play before I learn everything for the next day in school.**

Children reported that parents and caregivers sometimes undervalue leisure and recreation time spent using digital technologies. They want their parents to have greater trust in their recreational uses of these technologies, and to recognise the educational and other benefits that digital play can bring (see 'Family').

Croatia, boy, 13: **Let me play more. I can learn a thing or two while I play videogames.**

Indeed, by limiting opportunities for spontaneous and unstructured play, restrictions may at times be detrimental to children's development and curtail possibilities for learning and experimentation, which can often be a positive by-product of play (see 'Education').⁵⁸

Children want adults to recognise the value of digital play for their learning and development, and to respect their evolving capacities to independently balance their right to leisure and play with other rights.

While adults tend to understand and value the educational benefits of children's digital play, children themselves are most excited about the fun, relaxation and opportunities to socialise with other children afforded them by play in digital spaces. For children, these hedonic aspects of digital play have benefits for their mental health, and thus constitute benefits in and of themselves. As such, children are eager to play online, in all its varied forms. While children are conscious that digital play can supplant their time engaging in physical activities, they told us that the benefits of playing online ultimately outweigh the potential negatives, and that the risks of harm should not prevent them from being encouraged to play online. Indeed, they are calling on their parents and carers to better understand the benefits of digital leisure time; to respect their evolving capacities; and to support them to independently and responsibly balance digital play with their other rights.

⁵⁷ Third et al (2014). *Children's Rights in the Digital Age*; Third et al (2017). *Young and Online*.

⁵⁸ Stephen, C & Plowman, L (2014). 'Digital Play'; Livingstone et al (2017). *The case for a UNCRRC General Comment*.

In recent years, high-profile cases pertaining to the illegitimate harvesting of users' data – such as the Facebook–Cambridge Analytica scandal – have focused attention on the critical issue of privacy in the digital environment. In an interconnected world, privacy is vital to children's capacity to participate safely and to harness the benefits of being online.⁵⁹

While much of the debate, policy and programming – particularly in the field of online safety – has focused on the ways children may expose themselves to privacy breaches, their privacy is also potentially infringed by adults, such as parents and teachers, with whom they have everyday contact; by the surveillance, law enforcement, health-related or other data gathering practices of their governments; and by commercial enterprises whose business models depend on personal data collection and analysis.

Although we know that privacy is crucial to children's agency, safety and fundamental rights, international debates and interventions are yet to foreground and address their privacy needs in a systematic way.

Previous studies consistently show that children around the world care about and try to safeguard their right to privacy in the digital environment.⁶⁰ The vast majority of children who participated in the General Comment consultation consider the right to privacy to be critical in the digital age.⁶¹

Pakistan, boy, 16: **In my opinion, this right is the most important in the digital age.**

Philippines, girl, age unknown: **Children need privacy for [the] peaceful use of technology.**

Significantly, though, 90% of children who identified privacy as a significant right today believe it is under threat due to digital technologies.

New Zealand, boy, 16: **The digital age has opened [up] many new sources where people's privacy can be invaded...so there's a very strong need for this right.**

Nepal, girl, 13: **Nowadays, in the digital era, people are...losing their personal privacy.**

So, what are children's main privacy concerns and what do they think is at stake?

⁵⁹ Livingstone et al (2017). *The case for a UNCRC General Comment*.

⁶⁰ Livingstone, S, Stoilova, M & Nandagiri, R (2019). *Children's data and privacy online: Growing up in a digital age. An evidence review* (London: London School of Economics and Political Science); Stoilova, M, Livingstone, S & Nandagiri, R (2019). *Children's data and privacy online: Growing up in a digital age. Research findings* (London: London School of Economics and Political Science); Third et al (2017). *Young and Online*; Third et al (2014). *Children's Rights in the Digital Age*.

⁶¹ Children in high-income countries such as Canada and New Zealand tended to demonstrate a higher level of privacy literacy than those in low-income countries, though not exclusively nor uniformly.

Children's privacy concerns

a) Interpersonal privacy

Across participating countries, children generally recognise that the data they share can be used to identify who and where they are, as well as their likes, dislikes and the activities in which they participate. Reflecting previous studies,⁶² children worried that others – known and unknown to them – might use this data in ways that can negatively impact their security, safety and wellbeing.

Brazil, girl, 13: **On the internet, people share their information... This can be dangerous if an ill-intended person has access to it.**

Canada, boy, 14: **If you share your private data online, people can get access to it and it could become a threat.**

Croatia, girl, 11: **[People] can recognise you [from your data] and harass you.**

Children's concerns about the interpersonal impacts of privacy breaches range from a milder sense of unease about being misrepresented or embarrassed by others, either now or in the future, to more catastrophic outcomes, such as identity theft, bullying, physical harm, serious forms of exploitation, kidnapping, murder and suicide.

United Kingdom, girl, 16: **Your image could be used to represent a belief that you don't share.**

Canada, girl, 15: **There are matters of identity theft, stalkers, employers checking your records, blackmail, you name it.**

Chile, gender and age unknown: **There are people who think other things when they see your photos, such as sexual abuse.**

Philippines, boy, age unknown: **When we share too much information about ourselves it could [be] used as a tool in kidnapping [and] exploitation.**

Closer to home, children are adamant that the interpersonal privacy they crave should include privacy from parents and carers. They wanted their parents to refrain from reading their messages, to allow them to keep their passwords secret, and to ask their permission before sharing photos of their children online (see 'Families').

Croatia, boy, 11: **I want to be able to use private windows in Google. I don't want my parents to spy on my networks.**

Pakistan, gender and age unknown: **Tell parents to ask before posting a photo of them online.**

Table 1.3:

To share or not to share? (n= 202)

	Online contacts	School/doctors	Companies
Personal info	30%	70%	30%
Health records	12%	86%	15%
Contacts in their social network	51%	22%	26%
Biometric data	7%	22%	14%
Confidential information	7%	22%	10%
Internet searches	22%	9%	17%
Interests and preferences	58%	24%	36%
School records	31%	61%	18%
Location	23%	23%	13%

Children feel comfortable sharing personal information (70%), health records (80%) and school records (61%) with professionals, where there is a duty of care or it is required for them to receive a professional service (e.g. schools, doctors, etc).

(58% of children) feel comfortable sharing their interests and preferences with their online contacts, but were divided about whether they would share with their social networks (51% yes/49% no). Just over one third (36%) of children feel that sharing their interests and preferences with companies was okay, and over one quarter said they would share personal information (30%) and the contacts in their social networks (26%) with companies.

b)

Hacking

As in previous studies,⁶³ children worry about hackers using their data illegitimately. A few children reported that hacking is not a significant problem, provided that they set up and maintain their privacy and security settings, and share their data sensibly. However, three out of four children believe that hacking is prevalent, and range from being mildly concerned to alarmed by the potential impacts.

Germany, girl, 16: **It won't happen that easily if you set up everything correctly and you don't pass on your password. In case it does happen, your friends can notify the operator and your account will be cleaned and maybe deleted.**

Canada, girl, 15: **[Hacking] is a somewhat reasonable worry, so long as it doesn't verge into anxiety or irrational paranoia. After all, there are tons of people who steal others' information for their own personal gain.**

Philippines, boy, age unknown: **Hacking is rampant and they can use our data for sexual abuse and in pornography sites.**

Canada, girl, 15: **I think it is alarming how many people can hack into accounts and therefore how easy it is to access my information.**

These children are concerned that recent technological developments have made hacking easier and that they are vulnerable to exploitation by those with superior technical skill.

Pakistan, girl, 12: **It is easier nowadays to hack people and gain sensitive information without their consent using digital technology.**

Philippines, gender and age unknown: **Even if you think your account is secured, there are skilled hackers and people who would do anything to open your account.**

Overall, children have little faith that security and privacy settings, even when updated regularly, offer them adequate protection.

Children in this consultation – especially those in high-income settings – were generally attuned to and vocal about the potential for commercial entities to collect and use their data, perhaps indicating that widespread contemporary concerns around commercial entities' uses of data are shaping children's framings of privacy.

Children's commercial privacy concerns focus primarily on social media, and secondarily on apps and websites. Some say they know companies are collecting their data because they can detect the work of algorithms in serving up particular kinds of advertising and other content.

Canada, boy, 15: **I am...worried about my data being shared because, despite having my privacy settings on, I can see my preferences in ads and often get spam mail due to my email being shared.**

Norway, girl, 17: **Apps collect...your data. They sell this. You know you are exposed, because you get ads.**

Many are concerned that private entities have advanced techniques for collecting data and thus likely know more than children would be comfortable with.

Canada, girl, 13: **Even though your privacy and security settings are on, companies/people have advanced techniques to get what they want to know. They likely know more than us and can access more than we know was even available online.**

Such 'increased transparency of individuals to companies and governments in ways that are completely opaque to them'⁶⁴ undermines individuals' capacity to effectively exercise their rights.

While growing numbers of children appear cognizant that the platforms and services they use collect and use their data, the vast majority of children feel concerned, confused, somewhat conflicted and even outraged about how commercial data collection impacts their privacy. They said they are unclear about what data is collected from them, how it is stored, who has access to it and how it might be used – and they worry this leaves them vulnerable.

Canada, girl, 18: **You should be aware of what's being used and how. Otherwise you're left in the dark about exactly how much of you is 'public', which is a very dangerous position.**

Children want to understand who has access to their data, how it is collected, stored, and used.

Children have many questions about online privacy, indicating their desire for greater transparency, education and awareness. In particular, they would like to learn more about how their data and personal information is collected, where it is stored and for how long, how secure it is, who can access it, and how it is used.

United Kingdom, girl, 17: **[I want to know] EVERYTHING. Your data is your property. You have a fundamental right to know how it's being used. How easy would it be to misuse my data and is it being monetised?**

Croatia, boy, 12: **Do other people use my data for money?**

United Kingdom, girl, 16: **What do they use my data for? Do they try to influence my thoughts and feelings?**

Croatia, boy, 13: **Are we safe? Can we disappear from the internet? Why do they save our data?**

United Arab Emirates, girl, 12: **Are my photos saved when I send them to people?**

Canada, girl, 15: **How is our data stored and how secure is it? Who has access to our data? Is it used for anything other than which ads to target us with?**

Germany, girl, 17: **Where and how is the data stored? Who has access to them?**

Philippines, boy, age unknown: **Is the privacy setting enough to keep my data safe? Even if I remove my data, does the domestic or social website still have a copy of it? What are my rights in terms of privacy?**

Canada, girl, 17: **Does the data ever go away/ be disposed of?**

United Kingdom, girl, 17: **Who uses it? What is it used for? Can I keep it safe? How long do you keep it? Can I get it back?**

South Africa, gender and age unknown: **How do they keep your privacy safe? How safe is my password?... How do you keep your online information private?**

Philippines, girl, age unknown: **I want to know if my information or the things I share to my friends online really are limited to just them.**

United Arab Emirates, girl, 17: **Why do [websites and social media] ask me for my personal information if they aren't using it for any purpose?**

Croatia, girl, 13: **Why do they ask us our name and age in some online video games?**

United Kingdom, girl, 15: **I want to know more on what specific companies are using my data; I want to know how much money companies are making off my data; I want to know and access what data of mine is stored.**

Canada, boy, 12: **I want to know how it is filtered, shared, who it goes to, how people see your things, is it stored safely and HOW SAFE IS IT? .**

Philippines, girl, age unknown: **How secure is [my data] and how do the media keep it safe from hackers? I want to know where [my data is stored] and how effective it is. I want to know if my information...is also shared with their other trusted contacts?**

Some children in high-income countries worry that private entities use data to manipulate users, indicating that some children see their right to privacy (Article 16) as interconnected with their right to freedom of thought (Article 14) in the digital environment. They also expressed concern about the surveillance implications of standard industry data collection practices.

United Kingdom, boy, 16: **That amount of data can be used in many bad ways that could...manipulate people into doing things that they wouldn't usually do.**

United Kingdom, boy, 16: **Children and young people...have been manipulated by social media...to make money.**

Canada, girl, 18: **Location information and small pieces of data can be used in the goal of tracking back to you. For example, even mentioning you went on vacation somewhere says a lot, like you're not at home! It's very dangerous to not worry.**

Surveillance culture

What are the implications of growing up in a world in which it is common that others collect data about you, without you really knowing what is being collected or why? What effects does the normalisation of surveillance have on children's perceptions of their freedoms and rights?

While they highlight that consent is critical to their right to privacy, children said that the highly technical and constantly changing nature of terms and conditions prevents them from providing meaningful consent for common industry data collection practices.

United Kingdom, boy, 19: **There are many [uses of our data] we simply agree to... even on the highest privacy settings.**

Canada, girl, 15: **Websites and apps take and use our information, sometimes with our consent. But really, the fine print is so hidden that most people don't know [what] they've signed on to.**

This raises questions about the efficacy and fairness of standard consent processes as the foundation of children's capacity to exercise their right to privacy in the digital world.⁶⁵

However, because social media platforms have become key communication platforms for sustaining their family and friendship networks, children feel they have little choice but to engage with them.

Canada, girl, 18: **[Social media platforms] are known for spreading/gathering personal data, but due to social obligations and pressures, I do not plan to stop using these platforms.**

d)

Privacy from institutions

If children are suspicious of commercial data collection practices, they tend to be far more trusting of governments, believing them to be more open about the data they gather.⁶⁶

New Zealand, boy, 17: **Governments are more transparent about what they collect.**

Children were generally enthusiastic about possibilities for governments to use biometric data and smart technologies to make citizens' lives easier or better. Compared with commercial operators, who they primarily see as driven by self-interest, children generally believe their governments' data collection practices serve the collective good, and have few concerns about government violations of their privacy.

United Arab Emirates, girl, 17: **Governments will protect important information about the country. Companies will protect data about the companies or about how much their income is.**

Pakistan, boy, 13: **Governments will use [biometric data] for bank security purposes. Companies will use it for security of companies' trading.**

Where children have concerns about institutional privacy, they tend to centre on the government's capacity to safely store their data.

United Kingdom, gender and age unknown: **I trust the [National Health Service] with my data but I don't trust their ability to protect themselves from cyberattacks.**

However, in low-, middle- and high-income countries, a few children reported concerns

about governments gathering and using sensitive information – and particularly biometric data – about their citizens.

New Zealand, boy, 17: **[With] biometric surveillance, too much sensitive information is being collected.**

Romania, girl, 16: **[Governments] will [use], without people's consent, the data collected with...biometric surveillance technologies.**

There is certainly scope to encourage children to reflect on whether their trust in governments to collect and use data is warranted.

66 Children in Brazil, Ethiopia, Ghana, Indonesia, Jordan, Lebanon, New Zealand, Pakistan, Portugal, Romania, Russia, South Korea, United Arab Emirates and the United Kingdom commented on trust in relation to institutions' use of data. The key exception to this finding emerged in Portugal, where workshop facilitators noted that children were more likely to trust police, technology companies and their parents/carers than the government to keep their data safe.

Table 1.4:

How do children manage their privacy?

The majority of children manage their privacy using two key strategies: adjusting their privacy and security settings, and being judicious about what information they share online. However, children manage their privacy in a range of ways.

Children protect their privacy in the following ways:

A small minority of children **refrain altogether** from setting up social media accounts, or they disclose only very **minimal information**

Canada, girl, 15: **I do not have any account that has full information [about] myself as I do not use it to post about myself... I do not store information [about] myself inside the internet as I feel there is no reason to.**

The majority of children **exercise caution** about how much they share and who can see it

Norway, girl, 14: **Even though there aren't that many that will abuse your pictures, there will always be some that will. Always be critical about what you share.**

United Arab Emirates, girl, 14: **Your own data are not for everyone so you need to be careful.**

Pakistan, girl, 11: **I don't show such data which may cause problems in the future.**

Canada, boy, 14: **As long as you are conscious [of] what you share and don't give access to your [personal, identifying] information, you should be ok.**

The majority of children reported using **privacy and security settings and other technical measures** to protect their privacy. However, more than **50% of children consulted feel that privacy and security settings online provide limited protection**

Philippines, girl, age unknown: **I can control who will see my information [on] social media and who will not. I can choose who will see my posts, images and information [on] my account and I can choose who will not.**

United Arab Emirates, gender and age unknown: **Using a VPN [keeps your data safe].**

Canada, boy, 15: **I don't have/put anything I don't want on the internet on my social media. But when I do it's blocked from others that I don't want to see it.**

Germany, boy, 16: **I think that data is never really secure, irrespective of which security settings have been set up.**

United Kingdom, boy, 17: **There are so many ways your data can be collected so it's impossible for privacy settings to cover everything.**

Philippines, girl, age unknown: **Having all the privacy and security settings on doesn't mean that my data are completely safe... All that I can do is not to expose most of my important data.**

Despite their efforts to protect their privacy, across the board, children acknowledge that they don't always have understanding, choice or control over how their data is being harvested and wielded and many are worried about the implications.

Table 1.4:

How do children want their privacy to be protected?

Children are generally aware of the fact that datafication impacts their right to privacy, but there are key gaps in the information they receive from technology platforms, governments and others who collect their data about how and why their data is collected. While many children recognise that they must exercise responsibility in protecting their privacy, they nonetheless believe the onus is on governments and technology companies to guarantee their privacy in the digital environment.

To secure their right to privacy, children around the world are calling for more choice, and more control

over how their personal information and data is used. They are calling for governments to urgently enact more effective legislation and regulation. They are also demanding greater transparency – in particular from the private sector – about how standard data collection practices impact their right to privacy. They urge technology platforms to review and revise common consent procedures to ensure they are child-friendly; to provide simple and accessible privacy and security settings; to embed ‘privacy by default’ in digital services and platforms; and to support children, families and schools to develop privacy literacy skills.

To protect their privacy, children are demanding:

Stronger legislation and/or regulation to address how companies access and use their personal data

United Kingdom, girl, 15: **We need more legislation, especially for [those] under 18; you should get the choice of what is stored.**

Canada, girl, 15: **I would change the law about what companies can and can’t collect and distribute.**

New Zealand, girl, 16: **I would change...laws [to ensure] companies don’t have the power to use and share people’s personal information without their permission.**

Greater transparency from technology companies and others around the collection and use of their data

Germany, girl, 16: **Generally it is a gigantic riddle what happens to our data, as it is hidden in complex data protection agreements and legal texts. I would like to obtain clarity about what really happens with my data.**

New Zealand, boy, 17: **Governments and businesses need to be much more transparent about data use and collection. Why collect it? How is it being collected?**

Child-friendly privacy policies and terms and conditions

United Kingdom, girl, 17: **People need to know what they're agreeing to... [We need] more access to [information about] how our data is being used and by who.**

Germany, boy, 17: **We need] youth-friendly terms and conditions with a summary of the most relevant points.**

Canada, girl, 17: **More easily accessible data information and policies.**

Greater control over how their data is used, including the 'right to be forgotten'

United Kingdom, girl, 17: **[I want to] have more choice about whether to share your data, e.g. when accessing websites; when asked if you want to share your data, it should say with whom this information would be shared.**

Norway, girl, 17: **Information about me should be approved by me before it's used. [I also want to] approve what info about me is used for.**

Canada, girl, 17: **When a person deletes something, they [should] have the option for it to be erased for good.**

Regular notifications when entities collect, store and use their data

United Kingdom, boy, 15: **[I want] to be given a physical location about where my data is secured, as well as a monthly report detailing what all the data has been used for.**

Philippines, girl, age unknown: **I suggest social media notify first if someone wants to use and save information.**

United Kingdom, boy, 15: **I would like to be given a report about what my data is used for, even if it is for adverts.**

Simple and accessible privacy settings

Canada, girl, 17: **Technology companies need to make privacy options more accessible and easier to understand.**

United Kingdom, girl, 17: **[It needs to be] easier to opt out of cookies and data use.**

United Kingdom, boy, 17: **I [would] make online privacy more accessible to alter, as we are making the decision to give away our data when we enter a website.**

'Privacy by default' mechanisms

Canada, girl, 18: **I would change how everything is set to the default 'yes' to sharing private info. Instead, I would make the default 'no' for those permissions. For social platforms and preferences, the default should be 'no' without changing your access to these platforms.**

South Africa, gender and age unknown: **No [automatic] access to my locations.**

Croatia, girl, 12: **[We need] changes to default privacy settings, including the kinds of information [users] have to share, and agency in erasing their personal information. I would change [it so] that I don't have to give my personal data and that I know what [it is] used for.**

Education about the strengths and limitations of existing privacy and security settings, and other technical privacy features, such as cookies

United Kingdom, gender and age unknown: **We're not educated enough to know if [the privacy we have] is enough.**

Ghana, gender and age unknown: **[I need to learn more about] security and protection... but I don't have a teacher [who can teach this].**

Portugal, girl, 13: **No one ever told me what are the best techniques to protect my data.**

United Kingdom, boy, 19: **Educate/explain to people what cookies really are and what you plan to do with them.**

United Kingdom, girl, 17: **[We] need more education.**



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Article 8 of the UN Convention on the Rights of the Child contains provisions to protect children’s identities – specifically, their nationality, name and family relations. However, children in the consultations imagined identity, as it is shaped and differentiated by the digital environment, much more expansively than this. They highlighted the diverse ways they use digital technology to define and redefine themselves as they grow;⁶⁷ for example, by creating social media profiles, sharing ideas online, producing their own digital creative content, and connecting with local and international communities.

At the same time, children told us that the very spaces and practices they use to (re)invent their identities, can also threaten them. Many children’s digital footprints extend back to before they were born,⁶⁸ raising a host of issues about children’s capacity to consent to, and remain in charge of, their online identities as they grow;⁶⁹ how digital identities impact on children’s future life opportunities;⁷⁰ and risks of harm they might be exposed to, such as identity theft,⁷¹ discrimination, or hate speech against their individual or collective identities.⁷²

67 Buckingham, D (2007). *Youth, identity and digital media* (Cambridge, Massachusetts: MIT Press).

68 Lupton, D & Williamson, B (2017). ‘The datafied child: The dataveillance of children and implications for their rights’, *New Media and Society* 19/5, 780–794.

69 Donovan, S (2020). ‘“Sharenting”: The forgotten children of the GDPR’, *Peace, Human Rights Governance* 4/1, 35–59.

70 Buchanan, R, Southgate, E, Scevak, J & Smith, SP (2018). ‘Expert insights into education for positive digital footprint development’, *Scan: The Journal for Educators* 37, 49–64.

71 Holm, E (2014). ‘Social networking and identity theft in the digital society’, *The International Journal on Advances in Life Sciences* 6/3&4, 157–166.

72 Bauman, S, Perry, VM & Wachs, S (2020). ‘The rising threat of cyberhate for young people around the globe’, in Wright, MF & Schiamburg, LB, eds, *Child and Adolescent Exposure to Online Risks. An ecological perspective to consequences, contexts and interventions* (London, United Kingdom: Academic Press), 149–175.

Exploring and curating identities

Overall, children reported that digital technologies provide important avenues for them to question, experiment with and formulate who they want to be as individuals – both online and offline. They use digital technology to explore and express diverse aspects of their identities, including their personalities, interests, likes and dislikes, and values.

Pakistan, gender and age unknown: **Digital technology enables us to exist virtually as well. It helps you find yourself and define your interest[s]. Your identity can be more known.**

Pakistan, boy, 15: **Social media allows me to have the identity that I like and want.**

Romania, girl, 15: **With the help of the internet, you can carve your own personality.**

Indeed, the digital environment appears to offer most children an extraordinary opportunity to build the identity of their choosing. Many described using multiple social media accounts to experiment with different identities and ways of relating to others in different contexts.

Pakistan, boy, 12: **My style is different [on different platforms].**

Canada, boy, 14: **Online I have different accounts and I act differently.**

Children were generally conscious that they actively curate their online identities, highlighting that their online selves often reflect more 'polished' versions of themselves. They reported carefully editing and manipulating images to construct their online 'persona'.

Canada, boy, 12: **I act like I do better things than I do in real life. On social media it looks like I do things that I usually would not do in real life.**

Pakistan, boy, 14: **In our online self, we edit our pictures like professionals, but not too much.**

Norway, girl, 16: **In real life, I think it's easier to do things and look strange, but social media is more 'polished and nicer' in many ways.**

Canada, girl, 15: **[My online self is] 'my best self'**

Most children enjoy this creative curation of identity. But some find it challenging, sharing that they sometimes feel pressure to present a carefully curated self and that this can be time-consuming and burdensome. Indeed, while there are benefits to the possibilities for identity-exploration and self-representation in online environments, research has shown that social pressures to present curated online identities and to seek validation from social networks in the forms of likes and comments can negatively impact on children's mental health.⁷³

Importantly, the vast majority of children who discussed these issues reported that the identities they construct online differ, in some way, to their offline identities. For example, some children explained that, by engaging online, they find validation of their identities, gain confidence and can thus be more outgoing than they are in real life.

Germany, boy, 16: **Frequently, I am more open on the web than in real life. It's more straightforward on the web.**

Philippines, gender and age unknown: **In real life, I am shy and I have few friends. Online, I'm very talkative with the people I chat with and I have lots of friends.**

Other children choose to be more reserved online, which they explained as stemming either from a desire to keep aspects of their identity to themselves, or from a concern to protect their privacy.

Norway, girl, 14: **My online self is a bit more restricted, not that active.**

Canada, girl, 17: **In real life I'm more social; online I'm more closed off/less engaged in conversations.**

Canada, girl, 18: **My online identity is more unique and fascinating but does not reveal any personal information about myself that could be used to identify who I am.**

Sadly, however, a small number of children said that they felt that their use of social media limits their capacity to be themselves by 'pigeonholing' them and compelling them to conform to social norms and the judgements of others.

Brazil, girl, 14: **Because we are exposed to several types of content and judged based on our social networking website profiles, we can end up losing our identity because of changes in how others see us.**

Canada, girl, 18: **It pigeonholes who I am supposed to be and what I believe in. Through social media, I am unable to live my authentic self, because I know what others think and believe I am, even if it is different from who I really am.**

Nonetheless, overall, children tended to see their online selves as exciting, liberating, authentic and valid expressions of their evolving identities – and deserving of the same protections and rights that are afforded their 'real world' identities.

Canada, girl, 15: **Children should be allowed to be who they are on and offline.**

Canada, girl, 13: **In the digital age, we can change ourselves or 'become' someone else. Having a right to a digital self (and having it protected) should be standard.**

Belonging and (dis)connection: Political, cultural and religious identities

Children in the consultations drew attention to the important ways digital technology fosters opportunities for connection and affiliation with others, thus fuelling their sense of collective identity and belonging.

Online, children are exposed to new ideas, cultures and modes of expression, which they see as critical influences on shaping their sense of identity. Some children value online platforms as a means to access political, social, cultural and religious ideas and movements, such as feminism and environmentalism, which shape their world views and structure their identities. In this way, digital technology nurtures the relational dimensions of children's identities.

Canada, girl, 15: **Digital technology introduced me to major aspects of how I identify myself, such as feminism and equal rights for all.**

Pakistan, boy, 13: **Digital technology plays a role because, with its help...we can connect ourselves to the world and we can make an identity in the world.**

Canada, girl, 15: **Digital technology enables me to learn about the environmental issues that take place around the world, which is something I find important. This is how social media helps grow my identity.**

Some children reported valuing the acceptance, understanding and sense of belonging they have found on the internet, when they have connected with others with shared experiences or interests.

Germany, girl, 16: **On the internet I find more acceptance than in my 'real life' surroundings, which showed me that it is okay to be different.**

Germany, girl, 16: **My surroundings are very religious, that's why it feels good to meet people on the internet who think differently about things.**

Children report that communicating and sharing culture online is particularly important for strengthening the cultural identity of minority groups.

Pakistan, boy, 15: **Today's digital age provides a platform, a voice for the minorities of a country... By means of digital tech[nology], you can keep your religion and culture alive.**

Ethiopia, boy, 18: **[The] internet, in particular Facebook and YouTube, can create opportunities to introduce the culture, language and benefits of a particular community, including minorities.**

Nearly two thirds of participants reported that digital technology supports and promotes their cultural and religious identities.

Children said the internet gives them opportunities to connect to, learn about and promote understanding of their culture and identity, which is particularly affirming for children who are geographically separated from those who share their cultural identities. Children emphasise that these experiences create feelings of belonging and acceptance, strengthening their sense of identity.

Canada, girl, 18: **It makes me more aware of other people's cultural identity; I am distanced from my culture...in real life, but I am able to experience [it] online/through memes and posts/through talking to others.**

Canada, girl, 18: **I can find many people online with whom I share the same cultural identity... and we can encourage one another that it is okay to be ourselves.**

Canada, girl, 17: **Following positivity blogs/accounts help[s] remind me that I am not alone as a biracial child. Being able to hear/read their stories and connect with other biracial people/teens help[s] a lot.**

Philippines, gender and age unknown: **It is important to preserve our culture. In this digital generation, when all people are focused on social media, these platforms may be used to share information about culture, language and religion for those who are not aware of these.**

Philippines, gender and age unknown: **Digital media strengthens [my cultural and religious identity]. [It] makes us learn what we don't know about our culture. You can see what Islam is online.**

Kenya, gender and age unknown: **[Digital technology] strengthens understanding and respect of one's culture.**

Digital technology also facilitates children's participation in religious practices and rituals, enabling them to practise their faith with others, and enact these aspects of their identity online.

Canada, boy, 12: **I think it helps in some ways and for example I can get prayer times on the phone which let me pray on time.**

Canada, boy, 17: **[I use] Ramadan filters on Snapchat; and I read religious stories on Instagram.**

While children highlighted the many positive aspects of digital technology for their religious and cultural identities, many lamented the fact that digital environments foster negative stereotypes and discrimination, which impinge on their rights (see also 'Expression', 'Assembly and Association'). Some children reported experiencing bullying online for who they are, where they come from, and what they believe.

Canada, boy, 17: **Sometimes [people on social media] really pick on your religion.**

Canada, boy, 12: **People could hate on you [online], which could undermine your religion.**

Canada, girl, 12: **Sometimes there are jokes about [my identity] and sometimes it makes me second guess myself.**

So, too, children highlighted that digital technology can undermine important cultural and religious values and ways of being. Children in the global South felt that the internet prioritises cultural forms and values emanating from the global North, thereby eroding the strength of local cultures.

Pakistan, boy, 16: **[Digital] media has undermined our cultural identity by introducing different new fashions or hairstyles, and the youth are forgetting their culture.**

Pakistan, boy, 13: **We are connecting with other people [online] and forgetting our culture and traditions because we are using their way of life.**

Philippines, girl, age unknown: **There are people who disregard their culture because of social media. They change their views to copy what is popular instead.**

Philippines, gender and age unknown: **On social media, even other Muslims would wear daring and sexy clothes. As a Muslim, I believe we should do things to show respect to our own culture.**

Discrimination, under-representation or misrepresentation of minority groups online and in the media can negatively impact the development and validation of children's cultural and religious identities – particularly during the critical phase of adolescence – and can result in poorer mental health and wellbeing outcomes.⁷⁴ Furthermore, a lack of

representation of diverse cultures online, compounded by a lack of access to digital content in the languages they speak (see 'Information'), can sometimes make children from minority cultures feel unseen and insignificant.

Canada, girl, 17: **Sometimes, the lack of biracial representation can be hard to take in, as social media often forgets that we exist.**

To ensure that children from minority groups form a strong and healthy sense of identity as they grow up, it is imperative that governments and the mainstream media enhance the provision of diverse and representative information online.

For today's children, identity development occurs in a context mediated by digital media: one which can be both liberating and restricting. Most children in these consultations appreciate the opportunity to experiment with and construct different personas online, to connect with and learn about political, social, cultural and religious ideas and communities, and to share and virtually participate in their own culture and religion. These experiences can be deeply affirming, and many children value the sense of belonging they find in these digital spaces. Conversely, other children find that these spaces can be oppressive, inhibiting their identity development by exerting pressure to appear a certain way online, exposing them to bullying because of their beliefs, or eroding traditional cultural and religious values.

For better or worse, digital technologies are an ever-present force shaping children's identities, both online and offline. Children are calling on adults to support them to navigate these formative environments safely and to recognise that these are valuable and valid tools through which they can find belonging and a sense of self.

Children see the digital environment as critical to exploring and sustaining their identities and to nurturing their sense of belonging, and want to feel safe from discrimination when doing so.

Intersection of privacy and identity

In the digital age, the right of the child to preserve their identity is deeply intertwined with their right to privacy. Big data, e-government digital identity schemes, and 'sharenting' practices create digital footprints which, for some children (particularly those in high-income countries), extend to before they were born.⁷⁵ While big data and digital identity schemes can support children's rights to health and education, they can also threaten their rights to identity and privacy.

The children in this study were cognizant of the ways in which digital technologies can infringe upon their privacy, potentially risking their right to identity.

Indonesia, boy, 15: **A newborn baby even has a right to privacy. [If] an identity/number in the family card...is [shared], their privacy will be public.**

Croatia, girl, 12: **[Our privacy] is very compromised on the internet and we should [be able to] take care of our identity.**

Brazil, boy, 15: **It is important to keep your identity and not have it used by others, who can have access to your information.**

Echoing children's concerns in previous consultations,⁷⁶ children expressed particular concern about hackers and other third parties stealing their identities. By gaining access to their personal information and images, some children fear that ill-intentioned people could create fake profiles and impersonate them for malicious purposes.

Pakistan, girl, 12: **In this digital age, cyber crime is very common and the most common cyber crime of them all is identity theft, by making a fake profile.**

Chile, group activity: **It is a right to have a name. On Facebook, Twitter, Instagram, WhatsApp, they ask for your name/false identity/someone can find information about you on the internet and hurt you.**

Brazil, girl, 15: **In the digital age, the right to an identity is, in many cases, neglected. Personal profiles are often hacked, and fake accounts are created with personal photos and data. Hackers pretend to be the owners of the profiles and spread rumours and can cause serious problems.**

Thus, as identities become increasingly digitised and greater amounts of personal information are shared and stored online, the indivisibility of children's rights becomes ever more apparent. Parents, carers, educators and policy makers should ensure that efforts to support children's realisation of their rights in the digital environment simultaneously address the need to protect children's digital identities from privacy breaches which can impact their safety, autonomy and futures.

⁷⁵ Lupton, D & Williamson, B (2017). 'The datafied child'.

⁷⁶ Third et al (2017). *Young and Online*.

Engaging online potentially exposes children to a wide range of forms of violence and harm.⁷⁷ However, the relationship between digital technology use, risk of harm and benefit is complex.

Firstly, research in multiple contexts continues to show that those children at risk of harm in face-to-face settings are also most vulnerable in online spaces.⁷⁸ Secondly, we know that, the more time a child spends online, the more likely they are to encounter risks of harm.⁷⁹

During the COVID-19 pandemic, simply by virtue of being online more intensely, but also because, around the world, children and their families are grappling with the implications of major disruption to their social lives and livelihoods, children have been exposed to a greater number of risks of harm. Emerging statistics show that there have been surges in serious forms of online harm, such as cyberbullying and child sexual exploitation online during the pandemic.⁸⁰

At the same time, though, we know that, with increased exposure to the digital environment, children are more likely to develop the necessary literacies and protective skills both to prevent and to respond to online harms.⁸¹

Interestingly, in the consultations, many children noted that the internet can help to counteract violence and protect them from exploitation – both online and offline – by providing a platform for sharing important information, discussing issues of violence, and connecting people to support services.

Pakistan, gender and age unknown: **With the help of digital technology, children and those vulnerable can be protected from several types of exploitation.**

Ghana, gender and age unknown: **Technology has made communication easy in such a way that it is easy to share the ways of protecting oneself from being a victim.**

Chile, gender and age unknown: **[In cases of] kidnapping, the Internet serves [as a way] to notify the police and ask for help.**

⁷⁷ See, for example, Livingstone, S & Stoilova, M (2021). *The 4Cs: Classifying Online Risk to Children*. (CO:RE Short Report Series on Key Topics) (Hamburg: Leibniz-Institut für Medienforschung, Hans-Bredow-Institut (HBI); CO:RE – Children Online: Research and Evidence).

⁷⁸ See, for example, Livingstone, S & Third, A (2017). 'Children and Young People's Rights in the Digital Age: An Emerging Agenda', *New Media & Society* 19/5, 657–670.

⁷⁹ Livingstone, S, Kardefelt Winther, D & Saeed, M (2019). *Global Kids Online Comparative Report* (Florence: UNICEF Office of Research, Innocenti).

⁸⁰ See, for example, Jain, O, Gupta, M, Satam, S & Panda, S (2020). 'Has the COVID-19 Pandemic Affected the Susceptibility to Cyberbullying in India?', *Computers in Human Behavior Reports* 2; Babvey, P, Capela, F, Cappa, C, Lipizzi, C, Petrowski, N & Ramirez-Marquez, J (2020) 'Using Social Media Data for Assessing Children's Exposure to Violence During the COVID-19 Pandemic', *Child Abuse & Neglect* 116/2.

⁸¹ Smahel, D, Machackova, H, Mascheroni, G, Dedkova, L, Staksrud, E, Ólafsson, K, Livingstone, S & Hasebrink, U (2020). *EU Kids Online 2020: Survey Results from 19 Countries* (EU Kids Online).

South Africa, gender and age unknown: **[Kidnappings] can be put on social media, [to see] if people have seen the kidnapped person...[and] hence [they can be more] easily found.**

Ethiopia, gender and age unknown: **There are pictures [online] that show armed children from different countries, so we discuss with our parents [about] not to [get] involve[d] in conflict and to live in peace with society.**

Nonetheless, children around the world are concerned – a few excessively so – about the violence they potentially encounter online, and are calling on states, technology providers, child rights organisations, parents and educators to urgently take steps to protect their safety in the digital environment. Indeed, children in the consultation believe that digital technology has significantly amplified the possibilities that they will encounter serious forms of violence. For many children, seeing themselves as more vulnerable than other groups online, violence is an ever-present possibility that shadows their everyday digital practices.

Brazil, girl, 14: **With the Internet, [violence] is easier and more anonymous.**

Croatia, boy, 11: **There is much more violence since [the] internet was created.**

Norway, girl, 14: **Many people are abused online, they need protection.**

Pakistan, gender and age unknown: **In the digital age, children are more accessible and can be vulnerable to different forms of violence, which is why this right is very important.**

Philippines, boy, age unknown: **Technology [can be] used for doing any kind of violence, especially to children. It is important that children are protected from... violence because they are very vulnerable to...risk using technologies.**

Pakistan, girl, 15: **In the digital age it is very easy to exploit [children] through social media so this right is vital.**

Croatia, girl, 13: **Internet violence is... violence via messages, social media etc. It is a lot worse than physical violence, because it leaves much deeper scars.**

Which forms of violence are children most concerned about?

Children’s key safety concerns

Children highlighted in particular that the digital environment exposes them to risks of harm associated with inappropriate content, bullying, discrimination and harassment, sexual exploitation, catfishing, and even kidnap or murder. They were concerned about how children themselves might perpetrate violence towards others online (conduct risks⁸²), articulating specific concerns about cyberbullying, online harassment and, to a lesser extent, sexting. However, they also registered equally strong concerns about the risks of harm stemming from exposure to violent or sexual content (content risks⁸³), as well as the possibility that they

might be preyed upon by ill-intentioned adults (contact risks⁸⁴). Moreover, they consistently drew attention to the ways that online violence spills over into face-to-face interactions and vice versa, and they were concerned about the serious long-term mental health impacts on children that experience violence online.

Lebanon, gender and age unknown: **Harms online, [like]...verbal violence,...sexual harassment [and] bullying...can lead to problems in real life.**

Table 1.6: Children’s key concerns

Inappropriate content

Children reported that they worry deeply about encountering age-inappropriate, violent and/or sexually explicit content online. In addition to pornography and violent entertainment, they drew attention to disturbing news coverage and violent incidents live-streamed over the internet.

Philippines, girl, age unknown: **You can... encounter disturbing photos or videos that show inappropriate, abusive and sexual acts.**

Tanzania, gender and age unknown: **People upload inappropriate pictures and other bad things [on social media], for example, nudes.**

Pakistan, gender and age unknown: **Child pornography and other violent, disturbing material is accessible on social media platforms or the internet.**

Philippines, girl, age unknown: **The internet is useful but it can also be used to inflict violence or abuse. Children can also see and watch different types of violence like suicide [and] pornography, which they may emulate.**

Indonesia, boy, 13: **The internet... [can] spread ‘terror,’ such as a shooting incident occurring in a school.**

⁸² Livingstone, S & Stoilova, M (2021). *The 4Cs*.

⁸³ Livingstone, S & Stoilova, M (2021). *The 4Cs*.

⁸⁴ Livingstone, S & Stoilova, M (2021). *The 4Cs*.

Cyberbullying

Children highlighted that the internet can fuel bullying, and that online bullying can be particularly detrimental to children's mental health and wellbeing. They call for more support for children who experience bullying online.

Brazil, girl, 13: **Technology makes it so that some people practice bullying or are aggressive with others for being different or thinking differently.**

Brazil, girl, 15: **The internet allows for broader discussions about existing violence, but it increases the possibility of violence, such as cyberbullying.**

Philippines, gender and age unknown: **Social media can be used to bully other people and sometimes its causes...suicidal thoughts [and] depression, [which] deprives the rights of the child.**

Croatia, girl, 12: **Cyberbullying is when people send you messages like 'I hate you', 'You are ugly!'. It is when somebody asks you to send inappropriate photos of yourself, or when people use your data against you. Also, cyberbullying is making hate groups, calling people names, [and] mak[ing] fun of them.**

Discrimination and online harassment

In children's experience, online harassment is a common occurrence online, and often intersects with bullying across online and offline spaces. They highlighted, further, that the digital environment often compounds or amplifies experiences of discrimination relating to race, gender, ethnicity, age and ability. They call for better prevention strategies and more support for children who experience discrimination and harassment online.

Brazil, girl, 14: **The Internet can be easily used to attack someone verbally or to use personal information to hurt someone.**

Kenya, gender and age unknown: **Someone can use technology to accuse someone, post threats and abuse people, hence breaking relationships.**

Pakistan, gender and age unknown: **Harassment online includes homophobic, aggressive, racist [behaviour and] death threats, ridicule [and] exploitation.**

Croatia, boy, 12: **A child can be a victim of sexual and psychological...abuse online. Violence online is when somebody harasses children via messages.**

Lebanon, gender and age unknown: **[People] cause harms online by using terms aimed at harassing specific individuals, either for physical disability, or race, or colour, or height.**

Lebanon, gender and age unknown: **There is...sexual harassment online. [People] make unwanted comments...[and] use sexual terms for threatening or blackmailing.**

Sexting

Although not widely reported across the sample, children expressed some concern about the ways that sharing intimate images can expose them to reputational damage.

South Africa, gender and age unknown: **Naked pics can go viral without your intentions.**

Philippines, gender and age unknown: **Taking a picture of your private parts and posting on social media [is a problem]. Other people will see it which will ruin your dignity.**

Kenya, girl, 15: **There are violent activities done to others such as sexting on the internet.**

Sexual Exploitation

Children, particularly those in lower socio-economic settings, worry that social media is a tool for predators to groom, exploit and abduct children. Children want to know they will be safe from these harms when online but are concerned that they are not well-prepared to deal with these things. Almost without exception, children said greater efforts are needed to prevent violence and sexual contact harms.

Philippines, girl, age unknown: **There are cases that someone uses other's identity to talk to the other person or to negotiate [making] online sexual pornography.**

Pakistan, boy, 16: **In this digital era, children and youth are being increasingly [sexually] exploited by means of digital technology and the internet. That is why they are put in unforeseen danger and must be protected.**

Philippines, gender and age unknown: **A lot of bad persons use children to gain money to have income by selling the bodies of children to foreigners through social media.**

Philippines, girl, age unknown: **Social media can...be a tool to exploit children. Nowadays, children are very exposed in social media. Some [people] syndicate and they use social media to exploit children for their own benefit.**

New Zealand, boy, 18: **Social media is often now the leading form of exploitation of [sexual] images.**

Philippines, girl, age unknown: **There are rising cases of cybersex and [children] need to be protected [from] this issue. If we can't eliminate the issue, at least we can lessen it.**

Kidnapping, murder and other extreme risks of harm

Many children were concerned that location sharing, tracking and catfishing have made kidnapping and other life-threatening forms of violence easier for perpetrators. While some children noted that these serious risks of harm are unlikely, others were less sure about how to assess the likelihood they will encounter these risks. Some children are indeed more likely to encounter such threats and need greater protection. However, it may also be important to better support children to realistically assess and prevent potential threats.

Indonesia, girl, 16: **Kidnappers can track us from a location that we share.**

United Arab Emirates, girl, 12: **Now people trick young kids into giving them their location and then kidnapping them.**

Brazil, girl, 15: **Technology has made kidnapping easier because some teenagers meet up with people in secret.**

Canada, girl, 14: **Nowadays, it's unbelievably easy to catfish people and kids are very impressionable, making them an easy target if they have an online profile. It's important to remember that they have the right to protection.**

Nepal, girl, 14: **Due to the digital environment many social crimes like rape, kidnapping, murder etc are happening. The technologies like laptop, mobile phone, facebook, computer etc are major sources of these crimes.**

Croatia, boy, 12: **People on the internet force children to meet them and then they sell their organs.**

Violence as contagion

Across the sample, a few children expressed concerns that children might emulate the kinds of violence they are exposed to via the content they consume online.

Philippines, girl, age unknown: **The internet is useful but it can also be used to inflict violence or abuse. They can also see and watch different types of violence like suicide, pornography et al which they may emulate.**

Pakistan, gender and age unknown: **[I worry about] platforms such as the 'Blue Whale,' which encourages suicide or self-harm.**

Chile, gender and age unknown: **[I worry about] the 'Blue Whale'...I used to have a schoolmate who...started communicating with a person that told her to hurt herself and this person threatened her.**

Children said they worry about being vulnerable to insidious forms of coercion and contagion online. In particular, children drew attention to phenomena such as the Blue Whale and Momo, both of which were widely reported by the mainstream media, generating moral panic in some parts of the world.⁸⁵ The mainstream media

representation of online threats thus appears to be one source of children's heightened anxiety engaging online, suggesting that developing guidelines around the media's responsible reporting of online safety issues is important. Beyond that, there is clearly much scope to provide better protection for children when they are online. At the same time, nurturing children's sense of safety online – by asserting the many benefits and opportunities they can derive from engaging in the digital environment and encouraging them to explore the internet in safe and supported ways – will be critical for children's capacity to maximise the digital environment for their rights.

Gender and violence online

Children around the world highlighted that, just as gender shapes their access to and use of digital technology (See 'Access'), so too, it profoundly shapes their sense of safety online. Children generally agree that girls are more likely to be at risk online. Children attributed this to gendered social norms that reinforce different standards for boys' and girls' behaviour online.

Pakistan, boy, 17: **Girls are more at risk because they face societal pressure.**

Lebanon, boy, 18 & boy, 15: **The harm to a girl is greater than to boy because of the society and its restrictions.**

Jordan, gender and age unknown: **The female is more vulnerable because of reputation[al risks online]**

South Africa, gender and age unknown: **[People] think that girls [who share selfies] are nasty, cheap, sex-slave[s]. They think more badly of girls that do these things [than boys].**

Some children suggested that exploitative or degrading content fuels negative gender stereotypes and called for this content to be more tightly regulated.

Canada, girl, 17: **In the modern day, there are so many negative and exploiting/degrading content/pages that exploit...women and children which can have negative and dangerous effects on those being exploited.**

Girls in a few countries expressed explicit concerns about boys' threatening to share private photos, videos and chats containing sexual or flirtatious content either with girls' families or more publicly,

potentially subjecting them to shaming and punishment at home and in their communities.

Lebanon, gender and age unknown: **Boys exploit girls and share [with others] photos, videos, or...conversations that they sent them...Then use these to threaten the girls that they will tell their family.**

By the same token, illustrating the double bind of gender barriers to girls' access and use of digital technology, children in some countries noted that girls were less likely to encounter risks of harm online, because social and cultural practices constrain their opportunities for digital participation.

Ethiopia, boy, 18: **Girls wouldn't have faced the problem...as parents make them busy.**

In short, girls and boys across the world were generally concerned that girls face heightened risks of harm online and call for their better protection. As girls come online in growing numbers, tackling this gendered differential will require policies and programming that specifically addresses the gendering of online harms, as well as strategies to address the unhelpful gender norms that shape girls' everyday, face-to-face experiences.

Children call for governments to afford girls greater protection online.

How children want the adults in their lives to support their safety online

Children around the world reported concrete steps they take to protect themselves from harm online. Their strategies include blocking people who behave inappropriately; not accepting friendship requests from strangers; being judicious about what information they share online; ignoring anonymous or aggressive messages; and so on. A few children said that they would stop using the internet and digital technology in order to protect themselves, suggesting that fear of encountering harms online can be a deterrent to participation in the digital environment.

Pakistan, gender and age unknown: **I stop using internet/social media...[One can also] inform telecommunications companies to resolve the problems [online].**

While they cited a wide range of avenues via which they could seek support to deal with online harms, overall, children said that they feel most comfortable reporting online safety issues to trusted adults, such as parents/carers and teachers.

Croatia, girl, 13: **[I would] talk to somebody who is adult, like teachers, parents, or my best friend and ask them for...advice.**

Pakistan, gender and age unknown: **[It's important] to be able to speak to your parents/guardians and to thoroughly process and figure out a solution without harming others or yourself.**

Ethiopia, gender and age unknown: **We can deal with the issue through elders and, if not, through the legal way.**

Malaysia, gender and age unknown: **I would tell my parents I had this problem.**

Indeed, children generally saw parents and carers as playing a key role in supporting their safety online. Children's advice to their parents and carers about how to protect them from violence online largely echoed the messaging of online safety education. Even so, they asserted the importance of parents and carers understanding what their children do online and setting rules for their children.

Pakistan, gender and age unknown: **Make sure your children's social network are out private and only have the people they know on them.**

Croatia, gender and age unknown: **Be aware of all the social media kids are using, and who are they communicating.**

Kenya, gender and age unknown: **The parents are to keep strict rules...in regards to... children playing games [online].**

Malaysia, gender and age unknown: **Parents should...limit or observe children's screen time.**

Echoing research that shows that, in most cases, active mediation by parents and carers is more effective than restrictive mediation,⁸⁶ children urged their parents and carers to be open and respectful in their communications with their children about online safety issues, in order to help them stay safe in the digital environment.

Pakistan, gender and age unknown: **Parents and teachers should try to understand the problems of their children and students and they should not [overemphasise] the problems. Adults should help [children] and not dismiss them.**

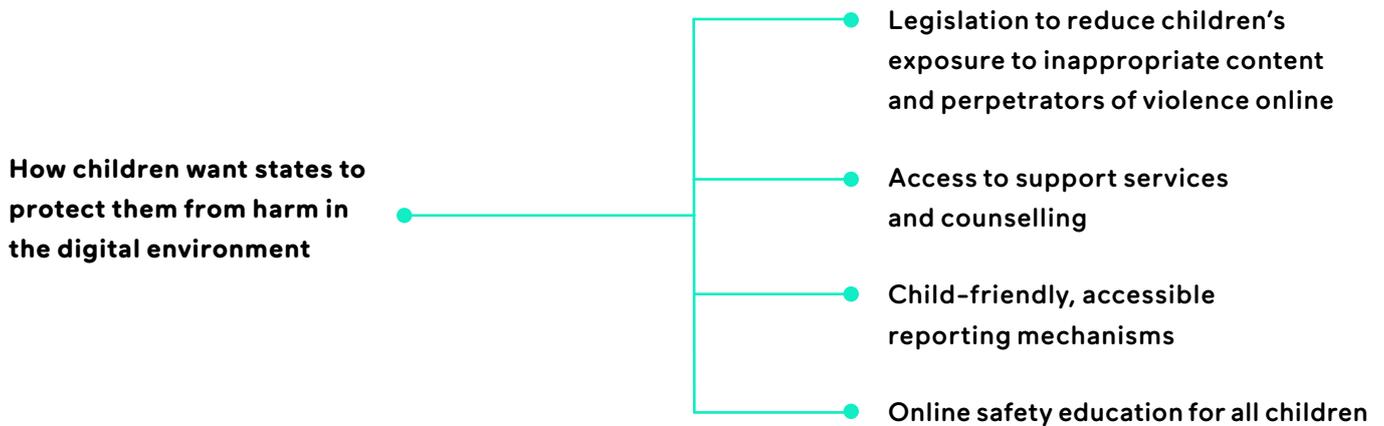
Croatia, gender and age unknown: **Do you know what your children are doing on the internet? Nobody knows your children as well as you do. Communicate with them and advise them so nobody could hurt them.**

Although they see parents and carers as vital to protecting them online, children want the digital world to protect them directly, not just through their parents. Children are calling on states, technology providers, educators, parents and others with key responsibility for children's safety in the digital environment to urgently enact greater protections to prevent them encountering serious harms. They want governments to introduce and enforce tighter legislation to reduce their exposure to inappropriate content and to prevent perpetrators of sexual exploitation and violence from accessing children. They urge governments to ensure there is better counselling and other support for child victims of violence. They called for child-friendly and accessible reporting mechanisms, and for governments to enhance children's awareness of these pathways to redress. And, lastly, they demanded that online safety education be provided to all children everywhere.

Children want governments to urgently take action to secure their protection in the digital environment, by providing stricter legislation, child-friendly reporting mechanisms, counselling and support services, and online safety education for all children, everywhere.

Figure 1.4:

How children want states to protect them from harm in the digital environment



Pakistan, gender and age unknown: **Children should have proper counselling both at home and at school to help them overcome their problems.**

New Zealand, boy, 17: **I would make cybersafety education MANDATORY so young people know how to act online, what to do...about...accessing sensitive content like pornography or very graphic/violent media.**

Overall, children want to know they are safe online, saying that this is important to their capacity to maximise the benefits of their use of digital technology and to realise a range of their other rights in the digital world. They said that greater protection from harm should constitute an urgent priority for all those with responsibility for children's safety in the digital environment.

A happy, loving family environment is crucial for the social, cultural and emotional development and wellbeing of the child. Parents and primary carers in particular, but also other family members, bear a responsibility to nurture children's understanding of, and capacity to enact their rights in, a range of settings. Today, for growing numbers of families around the world, this includes enabling children to realise their rights in the digital environment.

However, this is not always a straightforward task for many parents and carers. Digital technologies are transforming family relationships. On one hand, the use of digital technology can bring families closer together. On the other, it can create tensions between family members and potentially disrupt normative structures of authority within families.⁸⁷ Furthermore, many parents and carers report that they lack the necessary digital literacy knowledges and skills to support their children's safe and positive digital practices,⁸⁸ and often feel anxious about their child's online activities.⁸⁹ As a consequence, parents and carers tend to favour

restrictive over enabling strategies to mediate their children's technology usage. However, the research suggests that enabling strategies bring greater benefits in most circumstances.⁹⁰

Thus, in the context of digital transformation, families are faced with the challenging but critical task of striking a balance: between the potential risks of harm and the opportunities and benefits afforded by digital technologies; between children's protection and participation rights;⁹¹ and also between parental authority and the recognition of the autonomy and evolving capacities of the child.⁹²

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- 87** Third et al (2017). Young and Online; Blackwell, L, Gardiner, E & Schoenebeck, S (2016). 'Managing Expectations: Technology Tensions among Parents and Teens', *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing* (February 2016).
- 88** Third, A, Lala, G, Moody, L & Ogun, N (2020). *Online Safety in the Pacific: A report on a Living Lab in Kiribati, Papua New Guinea and Solomon Islands* (Sydney: ChildFund Australia, Plan International Australia and Western Sydney University).
- 89** Boyd, D (2014). *It's Complicated: The Social Lives of Networked Teens* (New Haven, Connecticut: Yale University Press).
- 90** Livingstone, Sonia & Byrne, Jasmina (2018). 'Parenting in the Digital Age. The Challenges of Parental Responsibility in Comparative Perspective', in Giovanna Mascheroni, Cristina Ponte & Ana Jorge (eds.) *Digital Parenting. The Challenges for Families in the Digital Age*. Göteborg: Nordico, p. 19-30
- 91** Dias, P, Brito, R, Ribbens, W, Danniela, L, Rubene, Z, Dreier, M, Gemo, M, Di Gioia, R & Chaudron, S (2016). 'The role of parents in the engagement of young children with digital technologies: Exploring tensions between rights of access and protections, from "Gatekeepers" to "Scaffolders"', *Global Studies of Childhood* 6/4, 404-427.
- 92** United Nations Committee on the Rights of the Child (1994). 'Role of the Family in the Promotion of the Rights of the Child', *CRC/C/24*, 7th Session (10 October 1994)..

The impact of digital technologies on family relationships

Children consulted to inform General Comment 25 noted that digital technologies can strengthen their connection and communication with their families. They reported, for example, that they use digital technology to inform their parents and carers of their whereabouts and safety, share special moments with loved ones, and connect with family members who are geographically separated.

Cambodia, boy, 13: **Digital technology [helps] us...stay in touch with family who are far away.**

Croatia, gender and age unknown: **If we're not home, cell phones or any gadgets will help us to give information to our parents to tell them we're safe.**

Malaysia, boy, 16: **I use digital technology to get in touch with dad, who works at an offshore rig.**

Philippines, gender and age unknown: **Technology helps in connecting families anywhere in the world. Communication helps families to solve problems together, despite being away from each other.**

For refugees and children on the move, in particular, the connective potential of digital technologies can play a significant role in maintaining contact with family in their home countries, supporting children's mental health and wellbeing.⁹³

At the same time, some children in this study also reported that digital technologies could create tension within families. They said that both children and parents/carers are easily distracted or consumed by devices and social media platforms, which in turn means that they spend less time interacting face-to-face, putting a strain on relationships.

Nepal, girl, 15: **Children don't give time to their family in the digital age.**

Kenya, gender and age unknown: **Spending too much time on the phone [negatively] impacts connection with family.**

Malaysia, boy, 16: **Relationships become strained with your mom because you prioritise online friends.**

Kenya, gender and age unknown: **In families, digital technology destroys the relationship one has towards the other since when one is more addicted to [one's] phone, one forgets to interact with the other person.**

Indeed, some children highlighted that their parents' and carers' use of technology negatively impacts on the time they spend with their children. Some pointed to a double standard at play, in that parents themselves do not always abide by the same rules – such as putting their mobile phones away at the dinner table – that they set for children. They called on parents and carers to role-model appropriate technology use for their children.

Egypt, gender and age unknown: **After the internet appeared...there is no time for the parents to sit with their kids and teach them some stuff for their lives.**

Philippines, girl, age unknown: **There are also some parents that are too busy using social media, or too busy at work, so they forget to take care of their children.**

Croatia, gender and age unknown: **We believe that our connection with family is critical and it is [impacted by] digital. We cannot obtain the maximum happiness and attention that we need.**

Children are calling on parents and carers to model appropriate technology use for their children.

Furthermore, two children from highly vulnerable communities in Chile highlighted that parents' or carers' preoccupation with digital technologies can result in child neglect.

Chile, gender and age unknown: **Digital technology affects children in a negative way, because parents have responsibilities to us, but they leave that behind because of social networks.**

Chile, gender and age unknown: **My mom doesn't punish me any more, she doesn't even hit me any more because she is hooked [on] her cell phone's screen.**

The potential role of digital technologies in exacerbating neglect in high-risk families is worthy of further investigation.

Table 1.7: What children want from parents and carers

Children want parents and carers to:

Trust in their skills and abilities to use digital technology well

Kenya, boy, 15: **Many parents and adults worry too much about kids being exposed to technology, as they worry for our safety. Well, I don't disagree with them for that, but just want to at least be informed that children are educated concerning technology in schools and they know how to deal with that.**

Tanzania, girl, 14: **I have never looked at nude photos online, nor have I ever watched porn videos – believe me, mama!... I use the internet to learn, to keep in touch with people who are far away and people that I meet.**

Kenya, girl, 16: **I want you to talk to our parents on our behalf and inform them that they should have trust in us whenever we are using technology.**

Give them greater autonomy in how they use digital technology

Ghana, gender and age unknown: **Parents should allow their children to use the internet freely.**

Philippines, gender and age unknown: **We need guidance from our parents, but they should not control us in all the things that we do.**

Canada, girl, 18: **I think that teenagers should do what they like and have parents as a support system and to always advise them on what is wrong and right instead of forcing it on their children. The choices that I make should shape me for who I am. Forcing or making it compulsory by the parents will only put us in a cage.**

Respect their privacy and seek their consent to share photos

Croatia, gender and age unknown: **I don't want my parents to read my messages.**

Croatia, girl, 11: **In two years, I can open my Instagram account. I don't want my parents to know my passwords.**

Croatia, boy, 12: **Mom should've asked if it is ok with him to publish that photo.**

Pakistan, gender and age unknown: **Tell parents to consult you and not post without your permission.**

Croatia, gender and age unknown: **I want them to ask permission before they upload a photo of me.**

Be better informed about the opportunities and risks relating to digital technology

Malaysia, girl, 13: **Citizens, especially parents, should be more exposed to the safety measures and benefits, as well as [the] disadvantages, of the digital world.**

Kenya, boy, 14: **You should make sure that parents are maximally advised on the positive sides of technology. Most parents are not sure whether to let their children access technology or not.**

Recognise the educational benefits
afforded by digital technologies

Croatia, boy, 12: **Let me watch educational content. It helps me.**

Croatia, girl, 13: **Dear parents! I know you think about my wellbeing, and that is why sometimes you tell me to put my phone down. But you have to remember, it has some good sides as well. I can use my phone to search for information for school, I can see my grades online, I can watch content that can teach me a lot. There, now you know that my phone has some good sides, too.**

Understand the importance of digital technologies in today's world

Croatia, girl, 12: **Dear mom and dad, today, technology is very important, and it will continue to be [so] in the future. It is hard to communicate without it. Everything is here, on the cell phone. I can find information about almost anything. I can talk to my friends whenever and wherever I want to. The world is moving forward, and so we must do the same.**

Family support for children's safe and meaningful use of technology

Children generally recognised that parental guidance plays an important role in helping them to engage with digital technologies safely and meaningfully, and in ways that support the realisation of their rights. Parental guidance, they told us, is essential to protecting them against, and helping them to navigate, potentially harmful content and experiences online, such as excessive technology use, misinformation and exposure to pornography and/or child predators.

Philippines, gender and age unknown: **If a child does not have a parent to guide [them] when using social media or the internet, they might end up watching bad content and this will affect them into adulthood.**

Indonesia, boy, 15: **In this digital era, parents need to look after their children because many crimes happen on social media.**

Pakistan, girl, 18: **A lot of malicious information/content is available online and [there are] threats like child predators. Parental guidance is necessary for children's safety.**

Nepal, girl, 15: **Due to the [addictive nature] of digital technology, children may not concentrate on their studies. That's why it is very essential to have parental guidance.**

Croatia, girl, 12: **Sometimes kids do what they shouldn't on the internet and their parents need to help them.**

Ghana, age and gender unknown: **If children are not well guided by their parents on the bad effects of...technologies, they will [become] wayward and therefore will have serious problems in the future.**

Children see their parents' and carers' roles in the digital environment not only as protectors, but also as enablers. They reported relying on their parents and carers to facilitate their access to devices, to help them solve problems, and to support their online expression (see 'Expression').

Chile, group activity: **Sometimes when we need help solving problems online, we ask parents to help us solve our questions or problems.**

Philippines, gender and age unknown: **My parents help me by allowing me to use a cell phone.**

Pakistan, gender and age unknown: **Our parents support our online expression by giving good reactions because they want to see us happy.**

Children from all parts of the world want parents and carers to support their digital practices, but feel that parents and carers lack the necessary knowledge and skills.

Most children accept that in order for parents and carers to support their safe and meaningful use of digital technologies, rules and restrictions must sometimes be placed on their usage. However, some children felt that these restrictions are borne from a misunderstanding and undervaluing of their opinions, motivations, digital experiences and skills regarding the digital environment. They told us that parents' and carers' lack of trust limits children's agency to use technology and can, for example, sometimes compromise their completion of schoolwork or their informal learning, with implications for their right to education.

Ghana, gender and age unknown: **My parents don't check how I use the internet, but just tell me not to use it.**

Nepal, girl, 14: **Sometimes our parents don't let us use digital technology. If we need to do our project work [or] important research, we can't do it.**

Nepal, girl, 16: **Sometimes, we are doing some important things with digital technology, and parents take our cell phone [away].**

Children implored their parents and carers to trust them more, and to afford them greater autonomy to use digital technology well.

Even so, many children turn to their parents and carers to teach them values and 'higher order' skills such as critical thinking, respect and tolerance. However, children reported that they most commonly learn technical skills from their siblings (see 'Education'). The role of siblings in supporting children's acquisition of digital skills warrants further exploration.

Lebanon, gender and age unknown: **Parents can teach kids about thinking critically about what to post on social media.**

Jordan, girl, 15: **Parents teach us to respect others' privacy online.**

Russia, girl, 14: **My brother...teaches me coding.**

Ghana, gender and age unknown: **I let my brother teach me how to hold the cursor down to highlight text.**

Children's tendency to turn to their siblings for guidance with technical skills perhaps reflects that they feel more confident in their generation's digital skills and literacies than those of their parents and carers. In fact, they expressed a deep sense of expertise, listing a range of digital skills that they could teach the adults in their lives.

Portugal, boy, 19: **Children and adolescents nowadays know more about the internet than adults.**

Romania, girl, 14: **I could teach an adult how to use a more advanced phone or a smart device.**

Lebanon, gender and age unknown: **Kids can teach adults [about] downloading files, uploading photos, creating accounts, commenting, sharing.**

South Korea, girl, 12: **I can teach adults about [the] games and search engines of today's generation.**

It would seem that, especially in those places around the world where both adults and children are coming online for the first time, there is value in nurturing intergenerational learning opportunities, to build both children's and adults' skills and understandings.⁹⁴

A Digital Generation Gap?

Children in this study clearly identify as part of a 'digital' generation, distinct from their parents' and grandparents' generations. They told us that digital technologies play an integral role in shaping who they are and how they live their lives, by providing them with more, and different, opportunities to play, communicate, learn and express themselves than those their parents had access to.

Compared to their own digital practices, they said that there are key differences in the way that older generations use these technologies. Children perceived that, not only did their parents and grandparents use different platforms and devices, they also tended to interact exclusively with immediate family members online, rather than broader social

circles; to present more realistic personas online; to post more on social media; and to be less cautious when it comes to sharing family photos. Children's perceptions of these generational differences contest popular discourses that position children as excessive and irresponsible users of digital technologies.

Overall, children see themselves as more responsible users of digital technologies than those of older generations. Children also claimed they possess greater expertise, especially in relation to newer technologies and platforms. Children's observations reflect dominant narratives that frame children as accomplished users – or 'digital natives'⁹⁵ – and parents as less digitally able.

The above notwithstanding, still one quarter of children reported that they lack meaningful parental support for their digital technology practices. Children attributed this primarily to their parents' and carers' lack of opportunity to familiarise themselves with digital technologies – especially the platforms that children themselves use – and to develop digital literacy skills. However, some children also highlighted that their parents and carers worry that being online exposes children to risks of harm, and thus they are reluctant to authorise their children's digital engagement, opting instead for tight restrictions on their children's digital practices.

Jordan, girl, 17: **Sometimes my parents support me and sometimes they get angry, because they didn't have this technology in their life.**

Nepal, boy, 16: **Our parents do not fully understand our problems, such as phones we use for projects, laptops, etc. And, so, we lack support.**

Pakistan, gender and age unknown: **Our parents and siblings do not support our use of digital technology because it comes with many risks.**

Lebanon, girl, 17: **My parents do not support me online because they are afraid of harm.**

Parents and carers with lower digital literacy levels or those who overly fear online risks may be less able – or willing – to provide support for their child's digital practices, which can result in restrictive, rather than enabling, mediation strategies (for a snapshot of the rules parents and carers impose on children, see 'Rules, rules, rules'). There is significant scope to support parents and carers to learn about and use digital technologies, so that they can, in turn, support their children to more effectively exercise their rights in the digital environment.⁹⁷

For the children in these consultations, digital technology can strengthen family relationships and unite families. At the same time, children were also concerned that digital technologies can fracture healthy family dynamics by decreasing the time family members spend with each other, potentially resulting in neglect. Children believe that parents/carers and siblings are an important source of advice and guidance in protecting them from a range of risks of harm online, ensuring their safe and productive use of digital technologies, and

⁹⁵ Prensky, M (2001). 'Digital Natives, Digital Immigrants', *On the Horizon* 9, 1–6.

⁹⁶ Livingstone, S, Olafsson, K, Helsper, E, Lupianez-Villanueva, F, Veltri, G & Folkvord, F (2017). 'Maximising Opportunities and Minimising Risks for Children Online: The Role of Digital Skills in Emerging Strategies of Parental Mediation', *Journal of Communication* 67/1, 82–105.

⁹⁷ Third et al (2014). *Children's Rights in the Digital Age*; Third et al (2020). *Online Safety in the Pacific*.

supporting their development of technical and non-technical digital skills. Generally, they trust their parents to provide this support and agree that parental rules are often in their best interests. However, some children reported that parents and carers undervalue their digital skills and motivations for engaging online and, consequently, sometimes impose unfair restrictions. Children reported that being misunderstood in these ways can be a source of significant frustration. They implore their parents and carers to afford them greater trust and autonomy online, to respect their privacy, and to recognise the full range of benefits that digital technology brings, so that they can more effectively enact their rights in the digital environment.

Children mostly said parents' and carers' restrictions were in their best interests, and that it is within the responsibilities of parents and carers to protect them

Table 1.8: Rules, rules, rules

When it comes to rules imposed by parents and carers, children said that:

Parental rules govern **when and how they use technologies**, what types of content they access, and how they should behave online

Croatia, boy, 12: **I am not allowed to use my cell phone at night, and no more than 2 hours a day.**

Kenya, boy, 15: **I want to always get updated on movies and trending issues, but my parents won't let me stay long in front of the screen.**

Croatia, girl, 12: **I am not allowed to insult people via the internet.**

Pakistan, gender and age unknown: **My parents tell me to express my political views but not in such a way that I may receive unnecessary backlash**

Reasonable restrictions are in their best interests, and they agree with rules that keep them safe

Croatia, boy, 12: **They should check my messages from time to time. They should be aware of all the people I come into contact with. They should check all the photos and everything we share on social media.**

Indonesia, girl, 16 & boy, 15: **Parents should more often monitor their children who are using devices. They should limit their children's use...of devices.**

Canada, girl, 18: **I think nudity/confidential information should be strongly regulated, or at least be more regulated by parents.**

Pakistan, gender and age unknown: **It is our parents' right to put restrictions on us, so that we sleep on time and don't use the internet late at night.**

Canada, girl, 11: **Our parents have the right to tell you that you can't put any personal info online.**

Parents' rules often change with their evolving digital capacities

Croatia, boy, 12: **I am allowed to use technology more now, compared to five years ago.**

Croatia, boy, 11: **Five years ago I was rarely allowed to use technology, and I always had to ask my parents' permission. Now, my parents don't restrict my use of technology.**

Croatia, boy, 12: **Now, I am allowed to play even when my parents aren't at home.**

In childhood – and during adolescence in particular – children develop the behaviours and practices that are foundational to their lifelong health.⁹⁸ These individual practices are critical not only for individual children as they grow, but also for sustainable and prosperous societies.⁹⁹ Digital technology potentially represents an unprecedented opportunity to support children’s right to health (Article 24), as they grow and transition into adulthood.

These benefits range from improved access to quality health information, telehealth platforms, self-care tools, and resources to enhance monitoring of chronic health conditions via biometric devices.¹⁰⁰ Indeed, the COVID-19 pandemic has foregrounded the potential for technology to support children’s health in circumstances that prohibit the provision of face-to-face health services.¹⁰¹ And yet, the global community is still to fully conceptualise, let alone actualise, the strengths and limitations of digital

technology for supporting and sustaining children’s health, both now and into the future.¹⁰²

Simultaneously, digital technologies can infringe upon children’s right to health, affecting the health outcomes of diverse children differently. Governments and health and technology industries are yet to comprehensively identify and address the potentially negative impacts of digital technologies on children’s health, foregrounding the need for stronger, more effective governance.¹⁰³

98 World Health Organization (WHO) (2017). *Global Accelerated Action for the Health of Adolescents (AA-HA!): Guidance to support country implementation*.

99 Schmied et al (2020). *Feeding My Child*, 1-96; Allen, ML & Martinez, S (2005). ‘The politics of children’s issues: Challenges and opportunities for advancing a children’s agenda in the political arena’, *Applied developmental science: An advanced textbook*, 325-352.

100 Third, A, Collin, P, Fleming, C, Hanckel, B, Moody, L, Swist, T & Theakstone, G (in press). *Governance, Children’s Rights and Digital Health* (The Lancet/Financial Times Global Commission on Governing Health Futures 2030); Holly, L (2020). ‘Health in the Digital Age: Where Do Children’s Rights Fit In?’, *Health and Human Rights* 22/2, pp. 49-54.

101 Merry, SN, Cargo, T, Christie, G, Donkin, L, Hetrick, S, Fleming, T, Holt Quick, C, Hopkins, S, Stasiak, K & Warren, J (2020). ‘Debate: Supporting the mental health of school students in the COVID 19 pandemic in New Zealand – a digital ecosystem approach’, *Child and adolescent mental health*, vol. 25, no. 4, 267-269; Hightow-Weidman, L, Muessig, K, Claude, K, Robert, J, Zlotorzynska, M & Sanchez, T (2020). ‘Maximizing digital interventions for youth in the midst of Covid-19: Lessons from the adolescent trials network for HIV interventions’, *AIDS and Behavior*, vol. 24, no. 8, 2239-2243; United Nations Department of Economic and Social Affairs (UNDESA) (2020). *Compendium of Digital Government Initiatives in Response to the COVID-19 Pandemic*; Angus, D, Connolly, M, Salita, M & Firor, P (2020). *The shift to virtual care in response to COVID-19 [Internet]* (PwC Australia).

102 Third et al (2017). *Young and Online*; Third et al (in press). *Governance, Children’s Rights and Digital Health*.

103 Third et al (in press). *Governance, Children’s Rights and Digital Health*.

In consultations, children were excited about, and grateful for, the myriad ways in which they observed digital technologies improving healthcare in their societies.

United Kingdom, boy, 19: **Technology leads to improved healthcare. For example, through AI, 3D printing and [being able to] send scans to [the] other side of the world.**

Romania, girl, 16: **The evolution of technology helps more and more people through the expansion of access [to health services].**

Philippines, girl, age unknown: **There is a lot of modern technology which can help cure different kinds of diseases and illnesses.**

South Korea, girl, 12: **When I was sick, the doctor could tell me how the bone was broken by taking a picture.**

Philippines, gender and age unknown: **In the digital age, there are more discoveries and innovations to diagnose sickness or illness.**

Chile, gender and age unknown: **The internet can call an ambulance.**

Nepal, boy, 13: **Digital technology is used by hospitals and health [centres]... to cure diseases.**

However, as we discuss further below, they were cognizant that digital technology can be detrimental to their health. Overall, though, in children's experience, the positive impacts of technology on their health and wellbeing outweighed the negatives.

Health information, advice and support

Chief among the positive impacts of digital technology on their capacity to maintain their own health that children identified was the ability to search for health information. Indeed, gesturing the indivisibility of children's rights, children see their rights to health (Article 24) and information (Article 17) as deeply intertwined.

They described using digital technology to seek information and advice about a wide range of health-related topics, ranging from general wellbeing tips about eating well, exercising regularly, and managing their time in order to minimise stress, to specific health information about the everyday physical and mental symptoms they experience.

Ghana, gender and age unknown: **The internet provides guidance on how to live a healthy life.**

Egypt, gender and age unknown: **I use it to search for healthy food and body exercises.**

South Africa, gender and age unknown: **You can access information online that helps get you better, like when you have a headache and what you can do. You can also download exercise [programmes] for diet and health reasons.**

Portugal, boy, age unknown: **I had a question...about what high cholesterol could do to me. I went to YouTube to understand what cholesterol was... It was very useful because I was able to figure out what could happen to me if I do not take the necessary precaution[s].**

Brazil, boy, age unknown: **So, I looked up when a little bump appeared on my groin next to my testicle and I thought it was disease, but I searched on the internet and I saw that it was just an ingrown hair. This gave me a lot of relief.**

Kenya, boy, 18: **The internet shows you the signs and symptoms of certain diseases, like HIV/AIDS.**

Nepal, gender and age unknown: **When I got depressed from my studies, I used YouTube to make progress in my studies, to manage time, which brought me relief.**

However, above all else, children reported that they use the internet primarily to seek health information about taboo subjects that they are uncomfortable discussing with parents and other significant adults. Many children said that they had searched for information about puberty and their changing bodies online. They also searched for health information about the effects of drug use. Being able to consult the internet was particularly important to girls, who reported that they most commonly searched for information about menstruation, pregnancy and other sexual and reproductive health issues.

Nepal, gender and age unknown: **My age is the age in which lots of new things happen – I didn't know about the meaning of puberty, so I searched on my mobile.**

Ghana, girl, age unknown: **[The internet] helps us to know our health status and gives a brief about drugs and supplements, living [healthily], family pregnancy and what have you.**

Russia, gender and age unknown: **I searched for information about drug overdoses, [which can] lead to coma and death.**

Indonesia, girl, age unknown: **I learned how to clean up my body after menstruation, based on my religion.**

Russia, girl, age unknown: **I used to ask about things I felt ashamed to ask mom about, different woman things, and the internet helped me.**

Alongside these issues, children reported searching for information about various mental health issues. They said that, whether because of cultural taboos, feelings of shame or other social dynamics, these issues are difficult to discuss with either parents and carers or their peer networks.

Brazil, boy, age unknown: **I researched about mental illness, depression and anxiety, out of curiosity, because nobody talked about it and I wanted to know more.**

Brazil, gender and age unknown: **I searched for information about suicide, and it was helpful.**

Portugal, gender and age unknown: **Once, I was ashamed of asking if I needed a psychologist. I went to the internet to the websites...to know different opinions.**

Nepal, gender and age unknown: **I searched [on the] internet [about] how to control [my] anger. It was useful information.**

A few children also noted that they had used the internet to seek information and support to help them manage the negative mental health impacts of using digital technology, such as those associated with excessive use.

Nepal, gender and age unknown: **In the early stages, when I [learned] to play online games, I was addicted to it. I had some problems asking for help and working out what to do, but when I [searched] it on Google, I found the solution. It helped me a lot.**

The challenges children reported in finding information and seeking advice about mental health issues from their immediate families and friends highlight the importance of online mental health services as a pathway to support. Online mental health services have been shown to be particularly effective in engaging young men to seek the help they need.¹⁰⁴

The majority of children trust the health information they encounter online, but they nonetheless recognise the potential for false or misleading information.

Romania, girl, 15: **Because it offers nutrition and health advice. The source of the information there is from safe sources, such as doctors. But that does not exclude the fact [that] each doctor has a personal opinion on health.**

Brazil, girl, 13: **A lot of people look up what they have and often find wrong information.**

Some children discussed how they use the internet to triage their health problems and decide whether they should seek professional health advice. Other children talked about how they draw on the internet as a complementary source of advice, to flesh out and triangulate the information they find elsewhere.

Romania, girl, 15: **If it is about general illnesses – such as a cold or coughing or nutritional, [the internet is helpful]. But on a more detailed scale ([like] troubles with the cortex or mucus membranes) I don't think it is trustworthy – better to see a specialist.**

Russia, gender and age unknown: **Of course, I asked my parents but sometimes I asked different questions on the internet. For example: how to pull yourself in when someone drives you mad... I learnt a lot of new information and even those things that were absent in our book and what I couldn't ask others about.**

104 Burns, JM, Davenport, TA, Christensen, H, Luscombe, GM, Mendoza, JA, Bresnan, A, Blanchard, ME & Hickie, IB (2013). *Game On: Exploring the Impact of Technologies on Young Men's Mental Health and Wellbeing. Findings from the first Young and Well National Survey* (Melbourne: Young and Well Cooperative Research Centre).

Some children reported that they were sometimes hesitant to search for health information online, and would rather discuss these things with trusted adults. Here, children foregrounded their trust in their relationships with parents, carers and mentors, and also trust in their health professionals, as reasons for preferring to seek this advice face-to-face.

Brazil, gender and age unknown: **I don't have a reason to research anything about health because I'm very close to my father and I can ask him anything.**

Portugal, gender and age unknown: **I do not feel the need to ask questions on the internet, I trust some adults, so I ask them the questions.**

Russia, girl, 14: **I don't trust the internet [for health matters] because many websites don't deserve trust. It's better to visit a hospital.**

Romania, girl, 16: **Health-related information should not be taken from the internet, but from qualified health professionals.**



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Children's views on the health benefits of digital technology

Beyond access to health information, children noted a range of other benefits of digital technology for their health (see Table 1.9). However, they were clear that experiencing health benefits is dependent on using devices in moderation, balancing their use with other important activities and obligations. Some highlighted the creative ways they integrate technology into other activities, such as exercise and work.

Access to digital technology helps children maintain their health, as they can seek information online, particularly about taboo subjects that they are uncomfortable discussing with parents and adults.

Brazil, boy, 14: I use technology dynamically, while performing daily activities, such as going to work and talking on the phone, running while listening to music, and all this instead of being locked in a room playing video games.

Table 1.9: Children's views on the benefits of technology for mental and physical health

Information

Ghana, gender and age unknown: **Digital technology enables us to research and know more about nutritious food and so on.**

Romania, girl, 15: **Health-related info is much more accessible online. It is very easy for us to search for remedies.**

Support for physical exercise

Brazil, girl, 15: **You can play music and do Fit dance and Zumba.**

Portugal, girl, 12: **My girlfriend does physical exercise with the cell phone. She is in good shape.**

Indonesia, boy, 13: **A smart watch encourages the user to do exercise and monitor their body condition so the user becomes more diligent to exercise and becomes more healthy...and confident.**

Uplifting content

Brazil, boy, 13: **When you are sad, the internet can help you see something that brings you joy and makes you happier.**

United Kingdom, gender and age unknown: **It's good craic [fun] reading everyone's posts. It's good for your mental health.**

Access to mental health support

Brazil, girl, 15: **Acceptance pages are very helpful.**

Brazil, girl, 14: **We can seek help on the internet. There is growth in support NGOs, [and] easy access to books and teachers.**

Connection and community

Portugal, girl, 13: **Digital technologies can be healthy for us, because we can find old friends on social networks**

New Zealand, boy, 17: **I use social media to give positive messages to people – stay strong! – and connect with friends and relatives all over the world.**

United Kingdom, girl, 16: **Being social [...] may prevent dementia.**

Children's technology-related health concerns

Children across the world are concerned about the impact of their digital technology use on their physical and mental health. They worry in particular about the mental and physical impacts of spending too much time online; how technology might fuel negative body- and self-image; and their exposure to illegal and harmful substances.

Table 1.10: Children's technology-related health concerns

Physical impacts of spending too much time online

Children highlighted that spending too much time using technology can negatively impact their posture, eyesight, and sleep patterns. They also noted that long periods engaging with digital technologies can impact their opportunities for physical activity, potentially leading to sedentary lifestyles and obesity.

Brazil, boy, 13: **Spending too much time on the phone...can impact your eyesight and give you headaches, and also...your neck or back can hurt.**

South Korea, girl, 13: **If you use the internet a lot, your health can deteriorate, such as bad back and poor eyesight.**

Cambodia, gender and age unknown: **We listen to music too long and get headaches.**

Kenya, gender and age unknown: **Light from the computer can lead to eye damage.**

Indonesia, boy, 15: **In this digital era, children spend more time with devices. This interrupts their time for food, physical exercises and rest, so children's health is affected.**

United Kingdom, gender and age unknown: **You can miss out on vitamin D by staying indoors too much.**

Brazil, boy, 14: **Staying on the phone until late means you lose sleep.**

Brazil, boy, 14: **Staying still for a long time [using technology] can lead to a sedentary lifestyle and obesity.**

United Kingdom, girl, 17: **[Using digital technology] can mean children are less likely to go outside/exercise.**

Egypt, gender and age unknown: **Digital technology is unhealthy when it is used for a long time. Looking too much at a mobile screen...causes poor eyesight or hand numbness because of holding it for so long.**

Mental health impacts of spending too much time online

Children associate overuse of digital technology with serious mental health effects. They worry in particular about bullying, social isolation, depression, stress, anxiety and suicide. They also worry that spending more time with technology means less time to develop important relationships and social skills, with implications for their wellbeing in the long term.

Brazil, girl, 13: **Spending too much time on the internet causes people to not play, not socialise with parents and friends, and can cause...mental illness.**

United Kingdom, girl, 16: **Phones may replace friends – [which is bad for] mental health.**

Pakistan, boy, 13: **Using too much social media affects one's mental health.**

Philippines, girl, age unknown: **Some information on social media...such as negative or suicidal thoughts...can trigger children to do harmful things, because they thought that it is alright to do so.**

Portugal, girl, 12: **The minute we get home, we are on the cell phone, but the cell phone may cause depression and bullying.**

Malaysia, gender and age unknown: **Her self-esteem goes down as a result of online shaming.**

Philippines, girl, age unknown: **Children can see posts on social media that are inappropriate... They can...think the posts are cool but it can actually affect their health negatively.**

Tanzania, gender and age unknown: **Overuse of technology can lead to isolation from friends and family, affecting mental health.**

New Zealand, boy, 17: **Sending nudes and bullying [can have] serious mental health impacts.**

United Kingdom, boy, 17: **People now have weaker social skills; [it] could cause people to be less sociable.**

Brazil, girl, 15: **When a person is full of prejudice on the internet, this hurts a lot of people.**

Negative self- and body-image

Children highlighted that engaging with digital technology – and in particular social media – can fuel dissatisfaction with their body and negative self-image, with implications for their self-esteem and self-confidence. They connect these things to the impulse to compare themselves to others when using social media. They also worry that some websites, apps and social media platforms can promote unhealthy practices, like pro-anorexia websites.

Brazil, girl, 15: **[Social media] breeds paranoia for the perfect body.**

Brazil, girl, 13: **[You can get] low self-esteem because you're not doing what others are doing [on social media], or you don't think you're pretty enough.**

Brazil, girl, 16: **Some websites can promote anorexia.**

United Kingdom, girl, 17: **You can develop unrealistic expectations from [seeing] photographs [that have] a negative impact on [your] mental health and body image.**

United Kingdom, girl, 17: **[Using] social media can lead to body confidence issues.**

Brazil, girl, 14: **Comparing yourself to others [who have] more followers, prettier clothes, [and are] having a happier life leads to depression.**

Brazil, boy, 15: **When you see people with better lives, it can make you depressed.**

United Kingdom, boy, 17: **Comparing yourself [to others on social media] can lead to anxiety.**

Access to illicit drugs

Children drew attention to the health and other risks associated with being able to access illegal substances online. At the same time, they also noted that the internet can play a powerful role in educating children about the harmful effects of drug abuse.

Ethiopia, gender and age unknown: **On Facebook we have posts that oppose drug abuse and teach the harms of drug abuse. We are getting information. These posts also give [...] information about where they take those drugs, the price, the time they take [them]. So this [information] may lead adolescents to take these drugs.**

Jordan, gender and age unknown: **You can buy shisha and electronic cigarettes [online] and also learn ways of doing drugs.**

South Korea, gender and age unknown: **You can buy strange ingredients such as cocaine and marijuana on the internet.**

Croatia, boy, 11: **You can order drugs online.**

United Arab Emirates, girl, 13: **You can buy drugs from the internet (the deep web).**

Chile, gender and age unknown: **You can find drugs and guns on the internet.**

Lebanon, gender and age unknown: **Positive: Teach children on [the] dangers of addiction; Negative: children learn addiction from others on the internet.**

Ethiopia, gender and age unknown: **Since the number of addicted children is increasing at an alarming rate, the internet can raise awareness through different means so that it may protect children from drug abuse.**

Ghana, gender and age unknown: **Digital technology enables children to know the outcome and bad effects of drugs...and know the measures to stay away from them.**

Addiction?

Many children reported being concerned about becoming addicted to digital technology, highlighting that addiction leads to serious mental and physical health issues. They worry primarily about gaming and social media use, seeing these as the most 'addictive' activities they participate in online. But children use the term 'addiction' in conflicting ways. Alongside serious concerns about clinical addiction, they often use the word 'addiction' to describe their positive attachment to digital technologies ('I'm so addicted to my phone'), and were quick to point out that, when they are engaged in other activities, they don't miss being online that much. Overall, children said that it was difficult for them to decide whether their occasional periods of overuse might constitute the onset of a clinical problem, and this worried

them. While it is true that many apps and platforms are designed to hold children's attention for sustained periods of time, it appears that popular narratives that align children's technology practices with addiction are making it difficult for children to discern between healthy and unhealthy patterns of use.

Brazil, girl, age unknown: **When you are playing a sport...you know it's time to stop because you get tired. On the phone, you don't really notice that. the measures to stay away from them. There is no physical fatigue, time passes quickly. Often, we don't even realise sounds, all this is to get our attention and make us more 'stuck'. The more we use it, the more we want to use it.**

Overall, children strongly valued the capacity to consult the internet for health information and to use a range of health-related apps and digital services to learn about and maintain their health, suggesting there is significant scope to develop evidence-based apps, online services and support networks specifically for children, to bolster their rights to health (Article 24) and information (Article 17). At the same time, children expressed deep concerns about the ways in which technology might negatively impact their experiences of health.

Today, there is a rapidly expanding ecosystem of digital products and services available to children to support their health. However, not enough of these are evidence-based, and many are not specifically designed for children. It is clear that, amidst the multiple competing interests that shape this ecosystem, there is much scope for states, NGOs, private enterprise, educators and others to collaborate and centre the best interests of children in the design, development and implementation of digital technologies for health.

The potential impacts of digital technology on children’s rights – whether by design or unintentional, whether positive or negative – are significant. Crucially, children’s rights are indivisible and inter-dependent and all have equal status. Also, a balance must be struck between safeguarding children’s individual rights and promoting collective benefit.

In April 2020, the World Economic Forum reported that 1.2 billion children in 186 countries were affected by school closures as a result of the COVID-19 pandemic.¹⁰⁵ As many schools have shifted to online delivery, digital technology has been critical in facilitating children’s right to education. Simultaneously however, this shift has also highlighted deepening inequalities between those who have ready access to digital technologies and those who do not.¹⁰⁶ If children are to fully maximise the opportunities of digital technology for their education, access issues must be addressed and children’s digital capacities must be nurtured.¹⁰⁷ While these consultations were conducted prior to the pandemic, many of the observations the children shared are especially relevant now.

Foreshadowing the pandemic to come, children in these and previous consultations,¹⁰⁸ highlighted that digital technologies provide opportunities for distance and mobile learning, enabling them to access education from home, regardless of where

they live. Of course, the world wide web was originally framed as an ‘information superhighway’ that would enhance educational opportunities for all, including the most disadvantaged. Given this history, it is perhaps not surprising that, of all the benefits of digital technology for their rights, children around the world most readily identify their right to education as being strengthened by the digital environment.

Children said that digital technology has particular advantages for children living in remote areas, or those who are unable to physically attend a school, including children in a humanitarian crisis.

New Zealand, gender and age unknown: **More people around the world can have access to education through the use of technology, and resources can be shared...to allow those who aren’t privileged to have access to ‘traditional’ education at a physical school.**

¹⁰⁵ United Nations Educational, Scientific and Cultural Organisation (UNESCO). ‘Education: From Disruption to Recovery’, en.unesco.org/covid19/educationresponse (accessed 3 March 2021).

¹⁰⁶ Organisation for Economic Cooperation and Development (OECD) (2020). *Combating COVID-19’s effect on children* (11 August 2020).

¹⁰⁷ Collin, P, Notley, T & Third, A (2017). ‘Cultivating Digital Capacities: A role for Social Living Labs?’, in Dezuanni, M, Foth, M, Mallan, K & Hughes, H, eds, *Digital Participation: Enabling Communities Beyond Broadband Access* (Cambridge, MA & Oxford: Chandos Publishing), 19–35.

¹⁰⁸ Third et al (2017). *Young and Online*.

Brazil, boy, 15: **As the internet advances, we can study online without leaving home.**

United Arab Emirates, boy, 16: **You can study online if you are not capable of going to school.**

Chile, group activity: **The internet is a tool to study online, or you can go to school through the internet.**

Beyond remote learning, children were also optimistic about the potential for digital technologies to enhance their right to education by improving access for children with disabilities, creating opportunities for self-directed learning, and providing effective and engaging learning tools for research and schoolwork.

Portugal, girl, 15: **Now there are things on the internet [to support children like me]. For example, parents go to the internet to see where the school is for the deaf.**

Ghana, gender and age unknown: **The internet helps the youth of today learn more. There are things that might be found on the internet that are not taught in our classrooms. It is also a medium for research.**

Philippines, girl, age unknown: **Digital devices are a more effective way for us to learn.**

Pakistan, girl, 12: **Sites now provide free online teaching courses which kids can use to educate themselves.**

United Arab Emirates, girl, 13: **You can FaceTime your teacher at home if you didn't understand things at school.**

Indeed, children from both the global North and the global South agreed that digital technologies are

integral to children's formal and informal learning experiences in the 21st century.

Canada, girl, 17: **Much of how we learn comes from technology, from school applications and sites like Google Classroom to online textbooks and writing assignments online.**

Nepal, boy, 13: **Most educational institutions use digital technology as a source of information from all over the world.**

Philippines, girl, age unknown: **Now, in the 21st century, most students are using digital devices and technologies to access information for their learning purposes.**

Pakistan, gender and age unknown: **The internet provides a helpful learning environment and is a supportive tool to aid in learning.**

Furthermore, many children asserted that digital technology is vital to realising their future aspirations and their full potential in a world that increasingly relies on the digital economy.

Ethiopia, boy, 17: **In the age of technology, if children learn to use the internet, they can be competitive in this life.**

Pakistan, boy, 13: **In the digital age, if we do not get an education, we cannot get good jobs and our future will be affected.**

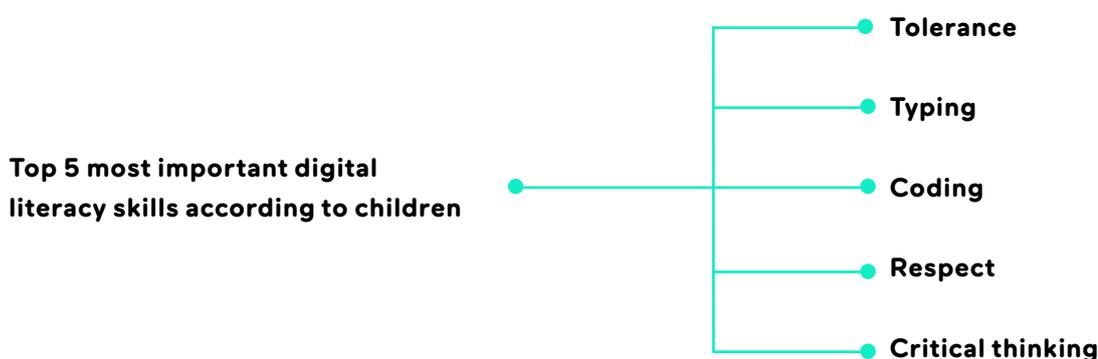
Nepal, boy, 14: **We cannot get job opportunities in this modern or digital age without education.**

Children in the consultations highlighted the importance of digital literacy skills for their capacity to maximise the educational opportunities afforded by digital technologies. They listed a wide range of

digital literacy skills they feel are important for children to know – including basic technical (e.g. knowledge of hardware, typing) and internet navigation (e.g. searching, downloading) skills; communication (e.g. sharing and messaging on social media) and creative (e.g. photo editing, coding, programming) skills; analytical skills (e.g. critical thinking); safety skills (e.g. data protection); and behavioural skills (e.g. respect, tolerance).

Interestingly, demonstrating a sophisticated understanding of the holistic skill sets needed to navigate the digital environment for maximum benefit, children identified digital citizenship skills, such as tolerance, respect, and critical thinking, alongside technical skills, such as typing and coding, as being amongst the most important skills for the digital age.

Figure 1.5: Top 5 most important digital literacy skills according to children



Children’s confidence in their own digital literacy skills varied significantly across the cohort. Some felt confident in their ability to create and share content (see ‘Expression’), while others felt unsure about how to set privacy and security settings online (see ‘Privacy’). Many children also said they were unsure how to know when to trust information on a website (see ‘Information’).

Children’s lack of confidence appears to result primarily from limited access to digital technologies at home and at school (see ‘Access’), or from a lack of opportunities to acquire digital literacy. Concerningly, participants across the sample – in both low- and high-income countries – highlighted that their school did not teach them important digital skills. Furthermore, children highlighted that teaching staff were generally not knowledgeable about these issues, producing gaps in children’s digital literacy skill sets.

- South Korea, girl, 13: **I have not learned Photoshop because I don’t have a cell phone.**
- Ghana, gender and age unknown: **I have not learned typing because there is no laptop or computer for me in the house to practise.**
- Ghana, gender and age unknown: **I was not able to learn how to highlight text because, when we were in primary school, we did not have an ICT teacher.**
- Jordan, group activity: **We have not learned how to print. We had no chance to be trained in this skill.**

Indeed, around the world, many schools lack basic infrastructure, including electricity, computers and the internet.¹⁰⁹ Furthermore, teachers, parents and carers are often not proficient in digital technologies themselves. These things hinder children's opportunities to learn and practise critical digital skills at school and at home.¹¹⁰

Concerned about the impacts that underdeveloped digital literacy skills could have on their rights, safety and future opportunities, children consulted to inform General Comment 25 called for greater opportunities to learn and acquire these skills.

Indonesia, girl, 13 & boy, 13: **Give education about digital literacy to students.**

Romania, girl, 16: **Educate the youth to tell the difference between fake news and real news.**

Ghana, gender and age unknown: **Education is needed by children because technology has brought about more bad activities like internet fraud, spam, abuse of rights, etc. Digital literacy education is needed to know the effects of these activities on us.**

Inequalities in access to digital technologies, inadequate digital literacy education, and language barriers frequently hinder children from harnessing and benefiting equally from technology in their formal and informal learning. Although the COVID-19 pandemic has perhaps accelerated the transition to online education, it has simultaneously exposed and deepened existing inequalities. To capitalise on the positive impacts of technology for children's right to education, states need to commit to enabling children to connect at home and at school; to support teachers in finding meaningful ways to integrate technology into the classroom; and to

invest in the digital literacy of children and their parents and carers. Aside from safety and basic technical skills, children are keen to develop the skills to communicate, create and evaluate information in the digital environment; and they are looking to adults to teach them these things. Furthermore, as the global community wrestles with the question of how to design and deliver effective education to greater numbers of children, it is critical that children's perspectives, experiences and desires inform pedagogy, policy and practice.

Children are calling on states need to commit to enabling children to connect at home and at school; to support teachers in finding meaningful ways to integrate technology into the classroom; and to invest in the digital literacy of children and their parents and carers.

¹⁰⁹ United Nations Department of Economic and Social Affairs (UNDESA). '4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Progress and Info', *UNDESA: Sustainable Development*, sdgs.un.org/goals/goal4 (accessed 23 May 2021).

¹¹⁰ Third et al (2020). *Online Safety in the Pacific*; Byrne, J, Kardefelt-Winther, D, Livingstone, S & Stoilova, M (2016). *Global Kids Online: Research Synthesis 2015-2016*. Byrne et al found that parents' skills were at a similar level to their children aged 12-14 years old, suggesting that their ability to help older children develop new digital literacies may be limited.

The combined trends of datafication, commercialisation and hyperconnectivity potentially expose children to a range of exploitative economic practices in the digital environment, with implications for their right to protection from economic exploitation (Article 32), as well as their rights to health (Article 24), privacy (Article 16), information (Article 17), education (Article 28), freedom of thought (Article 14), and so on.

Research highlights three key areas of concern about the potential for the economic exploitation of children in the digital environment:

Commercial entities' collection and sale of children's data;¹¹¹

Targeting of branding, advertising and marketing to children via digital platforms;¹¹² and

Child labour practices associated with digital content production.¹¹³

In the consultation to inform General Comment 25, a large number of children understood that commercial interests shape their social media interactions and their use of websites, apps and services. To varying degrees, they saw themselves as economic agents – primarily as consumers but, occasionally, also as labourers – in digital spaces. Overall, though, they were ambivalent about their relationship to the commercial dynamics of the digital environment. On one hand, they appreciate

the range of 'free' services and platforms that are available to them – and the allure of becoming an independent consumer in a digital marketplace offering unlimited products and services is strong. On the other hand, they were attuned to, often deeply concerned, but felt ill-informed about, how they might be subject to exploitative economic practices when using digital technology.

¹¹¹ Van der Hof, S (2016). 'I agree, or do I?'

¹¹² Verdoodt, V (2019). 'The Role of Children's Rights in Regulating Digital Advertising', *International Journal of Children's Rights* 27, 455-481.

¹¹³ Van der Hof, S, Verdoodt, V & Leiser, M (2019). *Child Labour and Online Protection in a World of Influencers*.

The commercial collection and use of children's data

Children's key concerns centre around how private companies are collecting and using the data they share – knowingly or otherwise – online. They generally acknowledge that their data is monetised – in particular, to generate revenue through the sale of audiences to advertisers – and that private entities profit from their digital engagement. Furthermore, children understood that the sale of users' data enables digital platforms, services and apps to be provided for free.

United Kingdom, boy, 17: **If the social media platforms didn't sell data, then they wouldn't be able to function.**

United Arab Emirates, girl, 11: **Social media [generates] advertising. So if we don't pay for them, the influencers/advertisers do!**

Norway, girl, 17: **Apps aren't free just because they don't cost money. They sell your data, which in many ways is worse... These [apps] make money on your information, rather than what you pay.**

Knowing their data is commodified has important implications for children's sense of agency in the digital environment. In an activity to map the power dynamics of the internet, 80% of participants identified themselves as the 'servants' from whom others – primarily technology companies or digital content creators – profit financially.

Canada, girl, 14: **Social media is free, because you are the product; meaning they can sell your data to advertisers and different companies without you knowing.**

This was a common sentiment across the sample and reminds us that treating children as the product when offering them online services can be perceived as a form of economic exploitation.¹¹⁴

Some children said they willingly share their data with these apps, platforms and services as a condition of their participation and see no real harm emanating from these arrangements.

However, four out of five children remain unconvinced that the exchange of their data for free services is just, particularly given that they feel the terms of such exchanges are rarely explicit to them. They pointed to a 'trade-off' with 'hidden costs':

Canada, girl, 13: **It's never a fair trade for your personal information. These platforms sell information to other companies, therefore it's always important to keep... certain information [to yourself].**

Canada, girl, 17: **While social media may be FREE IN PRICE, the 'PRICE' you pay [is] with the INFORMATION YOU GIVE to these platforms to share with companies. They can even SELL YOUR DATA to companies for them to advertise products to you. Therefore, there is a TECHNICAL 'PRICE' YOU PAY for FREE SOCIAL MEDIA APPS and you should be WARY of the information you share. Especially IF YOU'RE NOT COMFORTABLE with what they do/can do.¹¹⁵**

Indeed, children expressed deep suspicion of the motives of social media providers and companies providing apps for free.

United Kingdom, boy, 16: **Companies are using your data to make billions of pounds by selling it to companies that put your privacy and safety at risk. Are you still sure this is fair?**

Norway, girl, 17: **It's a bit scary to think about why free apps have so much money. I also wonder about their motives when they make a free app. Maybe they sell my pictures, data, etc.**

¹¹⁴ Van der Hof, S (2016). 'I agree, or do I?'

¹¹⁵ Capital letters were used by the child.

Canada, girl, 15: **Why wouldn't you be worried? Think about it. You get social media for free, yet the companies owning these platforms are swimming in cash. Surely there's a reason for their income, and it's most likely related to what they do with our data.**

Seeing these companies to be motivated by money or the accumulation of power, the majority feel disinclined to trust them, with some describing companies' practices as forms of manipulation and extortion.

Brazil, girl, 15: **[Social] media manipulates us and makes money off it. Companies...think about their own interests.**

New Zealand, girl, 16: **Tech companies tend to exist for profit and the benefit of themselves rather than the safety or quality of time spent on the internet, which makes them untrustworthy.**

Ghana, gender and age unknown: **[Technology companies] work for money or their personal gain.**

Canada, boy, 14: **You should not completely trust big companies, since they could easily sell your info.**

Children argued that their use of free services doesn't entitle companies to exploit their data. They said users should be able to trust companies to conform to basic standards that protect their data and their rights.

United Kingdom, girl, 14: **You should be able to trust a company with your data even if it is [deemed to be] a fair trade.**

United Kingdom, girl, 17: **Digital rights are human rights. It shouldn't be a trade.**

Norway, girl, 14: **Social media is free, but it's not okay to share [our] information and make money [off] it.**

Some children explicitly framed private companies' appropriation of their data as a breach of their privacy and security, suggesting that they understand well how their right to protection from economic exploitation is intertwined with their right to privacy (see 'Privacy').

Canada, girl, 17: **I...feel as if my privacy and security [are] being traded for a price.**

Philippines, girl, age unknown: **Just because I can use social media for free...[social media companies shouldn't be able to] use my data for free too. My personal data is still my privacy.**

Children called for tighter regulation of companies' access to and use of their personal data (see 'Privacy'), as well as greater transparency – including information in child-friendly formats – from companies about their data collection, storage and monetisation practices. In the meantime, children said they will exercise caution and try to minimise the opportunities for companies to exploit their data.

Brazil, girl, age unknown: **It is much more a matter of conservation, of preserving yourself, [rather] than of protection. Putting your faith in a big company may not work.**

Norway, girl, 16: **I think you have to be more aware than just clicking a box in settings.**

Children as consumers: the influence of advertising, marketing and branding

Children are a critical audience for advertisers and marketers. They are known to influence family consumption practices, but they also represent the future generation of consumers whose brand or product loyalties must be nurtured.¹¹⁶ Concerns have long been raised about the potentially serious negative effects on children's rights of private companies targeting their products and services to children online.¹¹⁷ Children are already exposed to a range of advertising and marketing techniques in the digital environment – including 'direct email, mobile messages, in-games advertising and advergaming'¹¹⁸ – and these are both proliferating and becoming ever more sophisticated.

The predominance of subtle, immersive, interactive and personalised digital promotion calls into question the extent to which children can make sound consumer decisions that serve their best interests.¹¹⁹ Furthermore, there are other concerns about the influence of digital marketing and advertising on children as they grow, including how they might perpetuate harmful stereotypes among children, or encourage them to develop unhealthy eating or other habits.¹²⁰

If children are consistently positioned as consumers in their online interactions, what are the long-term implications for their world views?

Children consulted for General Comment 25 talked enthusiastically about the range of products and services it is possible to purchase online, noting that, if given the opportunity, they would like to purchase clothing, shoes and fashion accessories; sports equipment; digital devices, such as mobiles, laptops, and game consoles; as well as beauty products, books, music and stationery. Although children reported having limited purchasing power

– with many reliant on parents to approve and facilitate online purchases – their sense of consumer potential is strong.

At the same time, children also recounted feeling at the mercy of advertisers and marketers in the digital environment.

Brazil, girl, age unknown: **The tendency is [for] a lot of brands to appear online, [encouraging] you to buy and not to think. You are exposed to advertising instead of constructive content.**

Children said that consistent and often cross-platform exposure to a wide variety of online branding, marketing and promotional content had influenced or would influence them to buy products online. According to children, branding dominates their purchasing desires and decisions. They reported a strong desire to purchase the products of global clothing and technology brands.

¹¹⁶ Van der Hof, S (2016). 'I agree, or do I?'

¹¹⁷ See, for example, UNCRC (2014). *Report of the 2014 Day of General Discussion*, 15–16.

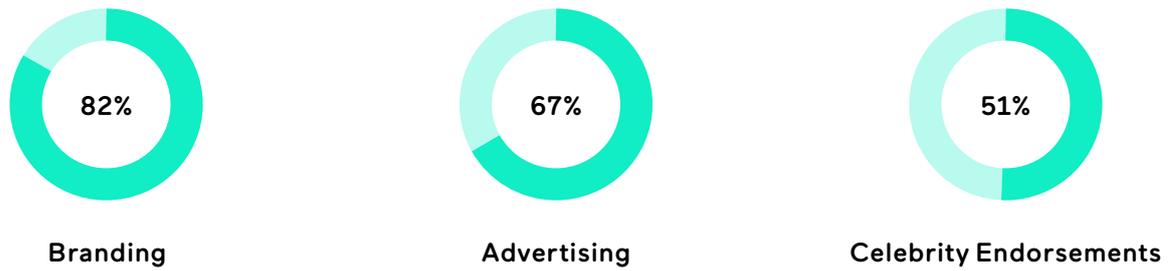
¹¹⁸ UNCRC (2014). *Report of the 2014 Day of General Discussion*, 16.

¹¹⁹ Verdoodt, V (2019). 'The Role of Children's Rights', 466.

¹²⁰ Grad, I (2015). 'Ethical Considerations on Advertising to Children', *Postmodern Openings* 6/2, 43–57.

Figure 1.6:

Influences on children’s purchasing desires and decisions



Advertising and celebrity endorsements are also key influences on their consumption aspirations and habits.

Brazil, boy, age unknown: **I think that advertising, especially with music, has a very big influence. The music stays in your head for several days. Sometimes people don't even know what that product is for, but they buy it because it's in their minds.**

Brazil, girl, age unknown: **If an [influencer] is using a product and is happy, we automatically associate happiness with the product [and] this makes us want to buy the product.**

Brazil, girl, age unknown: **To buy a game, for example. I wouldn't even know certain games if it weren't for my friends.**

Brazil, girl, age unknown: **The friend keeps talking in your head. Guys, I bought this. You should buy, buy, buy.**

It is thus difficult to tease apart the influence of family and friends from that of the broader commercial context, signalling some of the challenges for building children’s critical digital literacies.

Interestingly, though, children rated their immediate circle of family and friends as far more influential on their purchasing practices than either branding, advertising or celebrity endorsements, as conversations between children in Brazil illustrated. However, this insight is more complex than it might first appear. Brands and advertisements are part of children’s social interactions and shared culture, guiding their aspirations and generational identifications.¹²¹ Children indicated that they often amplify the power of branding, marketing and advertising forces by encouraging one another – both online and offline – to purchase goods and services.

Some children – primarily boys – reported that they were unaffected by digital branding, marketing and advertising. Others deliberately avoid following trends that are popular among their peers.

Brazil, boy, age unknown: **My style is a little different. I am not influenced.**

Brazil, boy, age unknown: **Seeing something on television or something on social media doesn't influence me at all. To me it doesn't matter.**

Although they reported being influenced by the volume of digital advertising, marketing and

branding they encounter, children recognised it is driven by a profit motive, and said they are disinclined to trust the content that they recognise as promotional.

Indonesia, boy, 15: **Sometimes, ads tell lies or the picture and the product are not the same.**

Indonesia, boy, 12: **Advertisers...still [spread] a lot of hoaxes.**

Ghana, gender and age unknown: **I don't trust [advertisers] since they are mostly not credible and...a portion of them are fraudsters and liars.**

Children were equally suspicious of those digital influencers that they see as motivated by personal profit.

Portugal, boy, age unknown: **Digital influencers...produce false information and content.**

Indonesia, girl, 16: **Most...influencers... lie or act fraudulently, so we are not sure about them.**

New Zealand, girl, 18: **With influencers...it is usually hit and miss. Some [influencers]... just do it for the fame, money, followers, so [they are] not 100% trustworthy.**

In response to these experiences, some children called for less advertising and marketing in the digital environment.

Romania, girl, 16 & girl, 15: **We would reduce the number of ads that seem to invade the internet for real.**

At the same time, many children felt they had no choice but to accept that digital spaces are structured by a commercial imperative that positions them as the targets of advertisers and vendors.



Children's digital labour

While we have so far focused on how children experience themselves as subjects of economic exploitation, some children understand their participation in a commercialised digital environment in terms of agency, as either current or future digital labourers. While it was not discussed at length by many children in the consultations, a few – not surprisingly, particularly those in the global South – talked enthusiastically about how they were able to supplement their family's income, or to generate their own income and sense of financial autonomy, by earning money online. Indeed, some were thinking creatively about how they could make money – and potentially a lucrative career – out of their digital practices. These children pointed in particular to online gaming as a source of livelihood, along with streaming and the capacity to buy and sell goods in online marketplaces.

Russia, boy, 16: **Online gaming...there are even competitions with money awards.**

Russia, boy, 16: **I will stream multi-user games from a powerful computer, for making money, every working day.**

Russia, boy, 16: **With streaming, one can earn a lot of money. For this, one should be charismatic.**

Kenya, gender and age unknown: **[There are] apps for advertising what you want to sell.**

Kenya, girl, 17: **[Digital technology] helps us buy and sell things.**

Not all children saw the upsides of child digital labour, however. Almost half of the children who commented were concerned that digital technology can be used to exploit child labour. Equally, though, some highlighted that the digital environment can facilitate greater accountability around the exploitation of child labour.

Canada, girl, 18: **If there is any child that is being put to work instead of being given an education, then millions of people [on] social media [can] raise their voice and... protest against child labour.**

Chile, gender and age unknown: **Children can't work... If someone sees you, they can report this on the internet.**

Overall, children were surprisingly sensitised to the commercial dimensions of the digital environment. While some were content to accept the trade-offs of sharing their data and being targeted by marketing and promotion in return for access to services that connect them to family and friends, many more children perceived their engagements to be shadowed by forms of deception and economic exploitation that are beyond their control to change. This causes the majority of children to interact with the digital environment with caution.

Children are calling on states and other duty bearers to enact tighter regulation to curb private entities' monetisation of their data; to ensure companies clearly explain their policies and practices to children; and to reel in the pervasive presence of marketing and advertising in the digital spaces they populate.

While children reported that they do encounter potential forms of economic exploitation in the digital environment, as their discussions of child labour indicated, they also see that there is potential to harness the internet to engender greater transparency and accountability. However, to seize on this potential will require that states, technology providers and others cooperate in realising children's needs, aspirations and entitlements.

2

Conclusion

Children provide a clear vision of the digital world they want. They want a more private, protective and transparent digital world: one that is age-appropriate and enabling of their interests, relationships and opportunities. They are determined that parents/ carers, governments and commercial companies should respect their rights, in particular those that would give them access to truthful information in their own language, to privacy and to protection from violence and inappropriate content.

They also want to maximise the benefits of being online: in particular, to create and shape a better world. The issues upon which children agree far outweigh the differences brought about by their specific circumstance and context, which may be as a result of the fact that irrespective of their context, they are largely using the same products and services – which in large part determine their experience.

This consultation, undertaken in partnership with organisations in 27 countries, captured children's views about their experience from a broad range of contexts and countries. However, it is important to note that digital technologies also have an impact on children without their active participation, for example by automating decisions about the distribution of public services or predicting educational outcomes. In this context, children's rights have a part to play, not only where children are active participants, but in all circumstances in which digital technology impacts on their lives. Children want – and need – to be a part of the digital world: not just as users of digital products, services and platforms, but as creators, decision-makers and citizens, both now and in the future. It is hoped that the insights documented in this report relay what children want and deserve from digital technologies and that steps will be taken to ensure that their needs will be met.

To ensure that children can benefit from the digital environment, the global community must urgently implement the UNCRC, along with General Comment 25, for and with children everywhere. The time to act is now: 'before systems, processes and industry practices [further] sediment'.¹²² As we do so, it is critical that we engage children themselves in the necessary transformation.

Ghana, gender and age unknown: **The state is governed by citizens, and children are citizens of the state. Therefore, it is necessary that our voices should be heard in governing the state. This could be possible if we are allowed to express our [views] on national issues through the media such as the radio, television and the internet, because knowledge lies not in one person's head.**

Nepal, girl, 16: **While governments are making decisions, they must talk with... children to know if children are comfortable or not in that decision. Decisions [about children's lives] shouldn't be conducted by the government without children's participation. All children are equals.**

Indonesia, girl, 14: **Governments should create an application that is friendly and attractive for children...With an application that is easy to use for everyone, children will be more confident in voicing their opinions.**

Nepal, gender and age unknown: **The government should conduct seminars and [hold] meetings with children to know their interests about their digital media use.**

Nepal, boy, 14: **Governments should include children in decision making about their digital media use, by creating groups of children and taking suggestions from children. Government should inform children before banning any digital media. Government should not make decisions without informing children in digital media.**

¹²² Livingstone, S, Lansdown, G & Third, A (2017). *The case for a UNCRC General Comment on Children's Rights and Digital Media: A report prepared for the Office of the Children's Commissioner of England* (London: LSE Consulting).

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Appendix 1

– Methods

The children’s consultations used the distributed data generation methodology, developed by the Young and Resilient Research Centre (Y&R) at Western Sydney University, and refined through a series of international implementations.¹²³ Distributed data generation is a primarily qualitative, creative and participatory, workshop-based method for consulting with children.

123 For an elaboration of the methodology, see A. Third, G. Lala, L. Moody & G. Theakstone, ‘Children’s Views on Digital Health in the Global South: Perspectives from Cross-National, Creative and Participatory Workshops’, in Lupton, D., & Leahy, D., eds, *Creative approaches to health education* (London; New York: Routledge, forthcoming). Previous studies include Third et al., *Children’s Rights in the Digital Age* (2014); Third et al., *Young and Online* (2017); C.A. Fleming, J.D. de Oliveira, K. Hockey, G. Lala, V. Schmied, G. Theakstone, A. Third, *Food and Me: How Adolescents Experience Nutrition Across the World. A Companion Report to the State of the World’s Children 2019*, (Sydney: Western Sydney University, 2020); V. Schmied, J.D. de Oliveira, C. Fleming, K. Hockey, G. Lala, G. Theakstone, A. Third, *Feeding my Child: How Mothers Experience Nutrition Across the World. A Companion Report to the State of the World’s Children 2019*, (Sydney: Western Sydney University, 2020)

The consultation team¹²⁴ designed a modularised, three- to five-hour face-to-face, creative and participatory workshop to be implemented with children and young people in their local contexts. The team then invited individuals and organisations internationally to recruit for and facilitate the workshops with diverse children.

To support their delivery of the consultation workshops, and ensure ethical and child safeguarding standards¹²⁵ were upheld, in-country facilitators were provided with a workshop facilitators' guide containing detailed instructions about recruitment; ethical principles and processes for working with children; comprehensive workshop activity instructions; and instructions for sharing the workshop outputs with the consultation team for analysis. Facilitators also participated in a 90-minute training webinar run by the consultation team prior to workshop implementation.

Workshops were designed to be fun and engaging for children and facilitators alike. Activities were designed to stimulate children's thought and discussion of key thematic areas, on their own terms, and in environments where they felt comfortable and safe to share their ideas. Children completed a range of individual and group-based activities, including short-answer responses, creative writing, drawings, cut-and-paste, scenario-based activities and group discussions. Children completed standardised worksheets to ensure their insights were collected in a consistent way across the international sample.

Distributed data generation produces rich, qualitative data on children's perceptions and experiences of their rights in relation to digital media. Facilitators collated and shared children's insights with the Y&R team for analysis, using a process that paid particular attention to protecting the privacy of children's data. Where workshops had been conducted in languages other than English, participating organisations translated children's responses into English, and shared both the translated and original materials with the consultation team.

The consultation team analysed children's insights using thematic, visual and discourse analysis techniques. To ensure that the analysis could appropriately account for the social and cultural nuances of this extensive cross-cultural dataset, in-country workshop facilitators were invited to participate in the co-analysis of their country's data, alongside members of the consultation team (see Appendix 1). Ten countries took part in co-analysis: Brazil, Canada, Ethiopia, Germany, Ghana, Jordan, Lebanon, New Zealand, Pakistan and Portugal.

124 The consultation team comprised Amanda Third and Lilly Moody, with input and support from Sonia Livingstone, Gerison Lansdown, Beeban Kidron and the 5Rights Foundation. Shakira Ali, Nukte Ogun Skye Tasker supported the analysis of children's contributions and Georgina Theakstone supported the write-up of the children's consultation findings.

125 For an overview of the implementation of child safeguarding in the children's consultation, please see page 121.

Workshop themes

Two previous child consultations had been carried out by the consultation team on children's views about their rights in relation to digital technology.¹²⁶ These consultations were analysed and mapped to the draft outline of General Comment 25 to identify key themes about which children across cultures had not yet been consulted.

As a result of this process, it was determined that the consultation to inform General Comment 25 would explore the following themes:

Children's rights in relation to digital media

Digital **literacy**

Digital media and **language**

Digital media and the development of **culture and identity**

The **commercial** dimensions of the digital environment

Digital media and **social, economic and cultural inequities**

New and emerging technologies

Adults' attitudes towards children's digital media use

Digital media and the right to **freedom of information and expression**

Digital media and **privacy**

Children's **participation and engagement**

Digital media and **physical and mental health**

Protection from **violence, sexual exploitation and other harms**

Children's **trust** in adult institutions

To ensure adequate numbers of children contributed insights to each of the above themes, participating countries were split into two groups (Group 1 and Group 2) and allocated half of the themes each (See page 122).¹²⁷ Both groups were required to complete an introductory activity focused on children's rights.

Each participating organisation could then select an additional two to four modules from the themes allocated to their group, based on which they felt were of greatest interest or relevance to their cohorts.

The workshop manuals and activities for each group can be viewed [here](#).



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Recruitment and Sample

A total of 709 children (aged 9-22 years old) were recruited from 27 countries, with representation from all of the United Nations Regional Groups (see Table 1.11).

In total, 69 workshops were held in 19 languages. Twelve of the 69 workshops were conducted in English, and 15 were conducted in Arabic. 52% of the participants identified as female and 40% identified as male, and 8% of participants chose not to specify their gender.

Table 1.11:

Workshop and participant numbers in each participating country

Country	No. of Workshops	No. of Children
African Group		
Egypt	3	52
Ethiopia	8	53
Ghana	2	29
Kenya	2	27
South Africa	2	17
Tanzania	2	21
Asia-Pacific Group		
Cambodia	2	20
Indonesia	2	20
Jordan	2	18
Lebanon	2	19
Malaysia	2	19
Nepal	2	20
Pakistan	5	43
Philippines	5	52
South Korea	1	15
United Arab Emirates	2	22
Eastern European Group		
Croatia	2	20
Romania	2	10
Russia	2	18
Latin American and Caribbean Group		
Brazil	4	60
Chile	2	17
Western European and Others Group		
Canada	2	32
Germany	3	40
New Zealand	2	6
Norway	1	8
Portugal	3	32
United Kingdom	2	19
27	69	709

Children were recruited by local, regional and international organisations, including universities, NGOs, INGOs and UNICEF country offices. These partner organisations recruited diverse participants and attention was given to recruiting groups of children with specific needs or requiring special protection. Children from minority groups, children living with disabilities, migrant, refugee or children on the move, children in street situations, children in conflict with the law, children from rural or low socioeconomic contexts, and other vulnerable or disadvantaged children were among those who participated in the workshops.

Recruitment focused on ensuring adequate representation across all of the United Nations Regional Groups. While the consultations in individual countries cannot be considered internationally representative, overall, the resulting sample represents the views of a wide range of diverse children.



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This consultation has received ethics approval from Western Sydney University's Human Research Ethics Committee (reference no. H13202). Where required, additional ethics approvals were obtained by participating organisations to work in their country.

In designing and conducting these consultations, the consultation team and partner organisations were concerned to safeguard children's safety, wellbeing and rights in the consultation environment. The consultations were guided by rights-based approaches, best-practice child participation models, and national and international ethics guidelines, to ensure that the process balanced children's protection and participation rights.

A number of safeguarding strategies were embedded into the consultation methodology:

Local facilitators were required to attend a facilitator training webinar held by the consultation team, which outlined the ethical obligations and duty of care of facilitators, including how to manage situations where a child may be experiencing discomfort or distress.

In a situation where a child may have been particularly vulnerable, and where their participation may put them at risk of psychological harm, facilitators were instructed to discreetly administer a Life Satisfaction questionnaire¹²⁸ to determine their suitability to participate.

Facilitators were also thoroughly briefed on the workshop rationale and activities, and were encouraged to adapt materials to ensure appropriateness of activities with respect to the age, cultural background and interests of the child participants, without compromising the consistency of data.

Partner organisations obtained consent from all children and a parent, carer or responsible adult prior to their participation in the workshops. All steps were taken to ensure that consent was informed and voluntary.

To protect the privacy and confidentiality of all children, only the country, age and gender of participants have been included in this report.

Allocation of participating countries to consultation themes

The below table shows the allocation of countries to each of the consultation themes. Effort was made to ensure that each of the United Nations Regional Groups was represented in each of the two groups.

GROUP 1

Brazil, Egypt, Ethiopia, Ghana, Indonesia, Jordan, Nepal, New Zealand, Portugal, Romania, Russia, South Korea, United Kingdom

Children's rights in relation to digital media

Digital literacy

Digital media and language

Children's participation and engagement

New and emerging technologies

The commercial dimensions of the digital environment

Children's trust in adult institutions

Digital media and physical and mental health

GROUP 2

Canada, Chile, Croatia, Germany, Lebanon, Norway, Pakistan, Philippines, South Africa, United Arab Emirates

Children's rights in relation to digital media

Digital media and the development of culture and identity

Digital media and social, economic and cultural inequities

Adults' attitudes towards children's digital media use

New and emerging technologies

Digital media and the right to freedom of information and expression

Digital media and privacy

Protection from violence, sexual exploitation and other harms

Data analysis

A preliminary round of data analysis was carried out by the Western Sydney University team, using inductive thematic analysis techniques. Following data entry, a member of the consultation team assigned codes to each response and subsequently grouped them into themes. These themes were then reviewed by a second member of the consultation team to ensure consistency of analysis and to verify interpretation. Themes were used to define key narrative insights and these were organised into chapter headings for this report.

Partner organisations were provided by the consultation team with a clean and anonymous copy of their respective country's dataset, a thematic analysis template, and predefined themes. Following this, a representative from each organisation conducted an independent analysis, noting any specific contextual insights they felt were relevant. A data synthesis process was then carried out by a member of the Western Sydney University consultation team. Country analyses were checked against and integrated into the larger dataset, where consistent findings were identified, and any context-specific or outlier findings were noted. Where outlier findings were relevant to the overall report, they have been incorporated into the 'key findings' sections.

Owing to the significant contributions of the partner organisations, this data analysis process added a depth and understanding to the data analysis that would otherwise not have been possible. While managing multiple interpretations of the data presented some challenges, ultimately these tensions highlighted both the profound differences in experiences of children around the world, as well

as some universal similarities. It also enabled the consultation team to situate the country findings in relation to both local and global contexts, and amplify marginalised voices and experiences that would usually be excluded from such processes.

Limitations of the study

While the consultation team took all possible steps to ensure that the consultation was both rigorous and practical, resource constraints and challenges inherent in international, cross-cultural consultations created some limitations.

The data presented in this report are not statistically representative and cannot be generalised to wider populations of children. Instead, the consultation aimed to give a voice to the diverse experiences of children around the world and to highlight the nuances of their perceptions of their rights and digital technologies.

Due to the breadth of topics covered in the consultation, partner organisations selected which activities they wished to conduct with their groups. This meant that all activities were not completed by all children, and data was not evenly distributed across topics. Where percentages and figures have been used to represent data, these are based on the number of children who participated in that activity, and not the consultation as a whole.

Distributed data generation raises challenges for quality control of data collection. The facilitator training webinar and standardised workshop manual and activity sheets were intended to control for some degree of variation in data collection. However, individual interpretation and varying levels of expertise among facilitators mean that consistency of data collection cannot be guaranteed.

Where workshops were conducted in a language other than English, partner organisations were responsible for translating the materials into the local language and then translating the children's responses back into English. Due to resource constraints, the consultation team was not able to confirm the accuracy of translation of materials or responses.

The cross-cultural nature of these consultations meant that the consultation team did not always have the necessary cultural knowledge to interpret and analyse children's insights. Co-analysis conducted with partner representatives helped to contextualise country-specific data and ensure these nuances surfaced in the final analysis. However, not all countries were able to participate in this phase and thus some detail may have been lost.

The consultation team was overwhelmed with responses from partner organisations to an initial call for participation. However, limited resources meant that not all were able to participate. The countries that were selected were chosen to ensure adequate representation from the major regional groups.

Some partner organisations had difficulties organising workshops due to extraneous factors such as school holidays. This may have resulted in lower participation numbers than would otherwise have been possible. In some instances, partner organisations who had been invited to participate were not able to implement workshops at all, due to challenges in recruiting participants.

