Seventy-eighth session
Agenda item 67
Promotion and protection of the rights of children

Status of the Convention on the Rights of the Child

Report of the Secretary-General*

Summary

The present report is submitted pursuant to General Assembly resolution 76/147 and includes information on the status of the Convention on the Rights of the Child, with a focus on the digital environment. In the report, the Secretary-General highlights how children’s lives and rights are increasingly connected to the digital environment and recognizes the vast potential of the digital environment for realizing children’s rights. He also calls attention to the potential harms to which the digital environment exposes children and flags the implementation gaps and barriers affecting the realization of children’s rights in the context of the digital environment, including in relation to the legislation, services and education required to ensure its safe and empowering use.

* The present document was submitted after the deadline so as to include the most recent information.
I. Introduction

1. The present report is submitted in accordance with General Assembly resolution 76/147, in which the Assembly requested the Secretary-General to submit to it at its seventy-eighth session a comprehensive report on the rights of the child and the status of the Convention on the Rights of the Child, with a focus on the digital environment. The report is submitted in accordance with that request.

2. Children account for an estimated one third of Internet users around the world.\(^1\) They are increasingly connected to the digital environment from younger ages and tend to have their initial experiences with digital technologies before the age of 2. Children spend increasingly more time online,\(^2\) relying on online tools, systems and platforms as new opportunities for realizing their rights. Such reliance was profoundly enhanced as a result of the coronavirus disease (COVID-19) pandemic.

3. The digital environment offers vast potential for realizing children’s rights. However, the rapid uptake and development of new digital technologies have not always been accompanied by the legislation, services and education required to ensure their safe and empowering use. The digital environment therefore also presents challenges and risks for children because their rights are rarely considered when it is designed, and children’s rights have largely been neglected in Internet governance.\(^3\) The digital environment can elevate the risk of exposure to harmful and untrustworthy content. It also provides new ways to perpetrate violence against children and to influence them to engage in unlawful or harmful activities. In addition, children are increasingly using digital tools that raise child rights issues related to privacy, data protection, consent, accountability and recourse.

4. Increased reliance on the digital environment also makes the “digital divide” more visible, further exposing the multiple and multifaceted discriminations and disadvantages faced by many children, including in particular for girls and those from poorer backgrounds and other marginalized situations.

5. Children’s access to the digital environment is uneven among countries, with disparities in access particularly striking in low-income countries and in the ability of girls or children in rural areas to access the Internet. Children further experience different barriers in accessing, using and benefiting from digital technologies based on their socioeconomic and sociocultural backgrounds. As at the end of 2020, approximately two thirds of the world’s school-age children – or 1.3 billion children aged 3 to 17 years old – did not have Internet connection in their homes.\(^4\) Children impacted by humanitarian crises face additional challenges in accessing the digital environment.

6. The United Nations promoted a series of initiatives dedicated to harnessing the power of digital technologies, devices and services. The recommendations of the High-level Panel on Digital Cooperation\(^5\) led to further consultations that translated into a

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“Road Map for Digital Cooperation”. Based on the Secretary-General’s initiative “Our Common Agenda”, the Global Digital Compact contains recommendations on a range of issues, such as digital connectivity, including for the more than 1 billion children who do not have access. It reinforces commitments to protecting children online, ensuring governance of artificial intelligence and strengthening data protection, adopting safety policy and standards and requiring child rights impact assessments.

7. Furthermore, the Office of the Envoy of the Secretary-General on Technology brings together various stakeholders to take forward the Secretary-General’s Road Map for Digital Cooperation in areas that include digital human rights and digital inclusion, artificial intelligence and digital trust and security.

II. Status of and reporting on the Convention on the Rights of the Child

8. As at 1 July 2023, all States Members of the United Nations, with the exception of the United States of America, had ratified or acceded to the Convention on the Rights of the Child, 173 States had ratified or acceded to the Optional Protocol to the Convention on the involvement of children in armed conflict, 178 States had ratified or acceded to the Optional Protocol to the Convention on the sale of children, child prostitution and child pornography, and 50 States had ratified or acceded to the Optional Protocol to the Convention on a communications procedure.

9. Since its previous report to the General Assembly, at its seventy-sixth session (A/76/305), the Committee on the Rights of the Child has held its eighty-eighth to ninety-third sessions, during which it reviewed 37 periodic reports and 2 initial reports. As at 1 July 2023, the Committee had received and reviewed all initial reports from States parties. The Committee had also received 617 reports pursuant to article 44 of the Convention, 123 initial reports and 3 periodic reports under the Optional Protocol on the involvement of children in armed conflict and 3 periodic reports under the Optional Protocol on the sale of children, child prostitution and child pornography. As at 1 July 2023, 64 periodic reports were pending consideration under the Convention, 6 initial reports and 1 periodic report under the Optional Protocol on the involvement of children in armed conflict, and 11 initial reports and 1 periodic report under the Optional Protocol on the sale of children, child prostitution and child pornography. Furthermore, 70 periodic reports were overdue under the Convention, of which 10 had been overdue for more than 10 years; 38 initial reports were overdue under the Optional Protocol on the involvement of children in armed conflict and 50 initial reports under the Optional Protocol on the sale of children, child prostitution and child pornography.

III. Children’s rights in relation to the digital environment

10. In 2021, the Committee on the Rights of the Child adopted its general comment No. 25 (2021) on children’s rights in relation to the digital environment, in which it clarified that the rights of every child must be respected, protected and fulfilled in the
digital environment and that meaningful access to digital technologies can support children in realizing the full range of their civil, political, cultural, economic and social rights.\(^\text{10}\)

A. **General principles and measures of implementation**

**Non-discrimination**

11. All children should have equal and effective access to the digital environment, without discrimination, and in ways that are meaningful for them. Although an increasing number of children around the world are connected to the Internet, access to digital technologies and services is still unequal, and patterns of inequality and vulnerability in the offline sphere tend to be amplified online.\(^\text{11}\)

12. In 2020, an estimated 86 per cent of school-age children (3–17 years old) had Internet access at home in high-income countries, compared with 6 per cent in low-income countries and 14 per cent in lower-middle-income countries.\(^\text{12}\) As at 2017, nearly 9 out of 10 young people currently not using the Internet lived in Africa or Asia and the Pacific, and children who did have access in these regions often experienced poor-quality connectivity and high data costs.\(^\text{13}\) Data on youth living in households shows that 9 out of 10 adolescent girls and young women are offline in low-income countries, and those who have access have fewer skills to use the Internet and digital technologies than male household members.\(^\text{14}\)

13. Children have also been excluded from using digital technologies and services on additional discriminatory grounds and have been the target of hateful and harmful content through the use of those services.\(^\text{15}\) Children from minority groups continue to be disproportionately affected by hate crimes and hate speech, which have escalated in the digital environment.\(^\text{16}\) The United Nations Strategy and Plan of Action on Hate Speech (2019) and the related #SayNoToHate campaign recognize the role of the digital environment, including social media, in perpetuating but also protecting children from hateful content online.

14. Discrimination may also arise when biased data concerning a child is obtained through automated processes that result in information filtering, profiling or decision-making,\(^\text{17}\) such as the discriminatory use of algorithms targeting children’s country of origin, ethnicity and/or religious status.\(^\text{18}\)

15. Conversely, the digital space has been a game changer for some children in disadvantaged situations. For children with disabilities, accessible digital technologies and spaces can promote social inclusion; children on the move have been able to remain in touch with family, to access information, support and services and

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\(^\text{10}\) See Committee on the Rights of the Child, general comment No. 25 (2021) on children’s rights in relation to the digital environment.


\(^\text{12}\) UNICEF and ITU, “How many children and young people have Internet access at home?”.


\(^\text{14}\) UNICEF, Bridging the Gender Digital Divide (New York, 2023).


\(^\text{16}\) A/HRC/46/57, para. 21.

\(^\text{17}\) Committee on the Rights of the Child, general comment No. 25 (2021), para. 10.

to find work and educational opportunities. For some children impacted by humanitarian crises, digital technologies have facilitated outreach faster and more efficiently and offered new channels of support.

B. Children’s rights and the business sector

16. Children’s rights are directly and indirectly affected by the business sector, including not-for-profit organizations, with particular regard to the provision of services and products relating to the digital environment. Multiple types of companies across various sectors, from toys to fast-moving consumer goods, are increasingly engaging with children through the digital environment. However, despite recent positive initiatives by some States, such as the European Union Digital Services Act (2022), as well as by the private sector, as for example in relation to digital child safety policies and child online safety assessments, children’s rights lay largely unaddressed by digital policies and frameworks.

17. In addition, the business sector is often responsible for the introduction on the market of new and emerging technologies, including the use of artificial intelligence. Artificial intelligence systems have the potential, for example, for improving educational opportunities, including by helping children develop critical thinking and problem-solving skills and providing personalized learning experiences through adaptive learning. Artificial intelligence systems are also showing capacity to contribute to emotional support and to detect evolving mental health issues. However, these opportunities also come with challenges and risks, such as algorithmic bias, profiling and targeting resulting in discrimination, marginalization and exclusion and infringements of data protection and privacy rights. In 2021, consultations held by the United Nations Children’s Fund (UNICEF) with adolescents across the globe highlighted that they were often consulted, but not considered as decision makers, when designing policies and shaping artificial intelligence technologies.

Access to justice and remedies

18. Children face particular challenges in accessing justice relating to the digital environment for a range of reasons, including the lack of legislation placing sanctions on children’s rights violations, specifically in relation to the digital environment, difficulties in obtaining evidence or identifying perpetrators, or because children and their parents or caregivers lack knowledge of their rights or of what constitutes a violation or abuse of their rights, among other factors. Further challenges may arise if children are required to disclose sensitive or private online activities or fear social exclusion or reprisals.

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20 Committee on the Rights of the Child, general comment No. 25 (2021), para. 35.
24 Committee on the Rights of the Child, general comment No. 25 (2021), para. 43.
C. Civil rights and freedoms

Respect for the views of the child, and freedom of expression

19. Digital technologies can foster children’s participation at the local, national and international levels, and children are increasingly making their voices heard through, for example, social media and blogging, including on matters such as social justice and climate action. They are also increasingly using online reporting platforms and other digital tools to express their opinions.

20. The digital environment can support child-led activism and enable children to form their social, religious, cultural, ethnic, sexual and political identities and to participate in associated communities. Children themselves have reported that they see digital technologies as fundamental to their right to participate in society as informed citizens and that they wish to engage in digital spaces without fear of harassment, discrimination or aggression.\(^{25}\) Positive effects ensuing from children’s expression of their views online include lower levels of peer-related loneliness and the strengthening of social ties.\(^{26}\)

21. Challenges to children’s online political participation and/or expression of their political views and identities in the digital environment have been identified as including criticism, hostility, threats, punishment, political risk and repercussion.\(^{27}\) In addition, research conducted across 31 countries with more than 14,000 girls and young women showed that 47 per cent reported being attacked for their opinions, diminished in their credibility and silenced.\(^{28}\) The Committee on the Rights of the Child has also highlighted the need for States to introduce data protection regulations that prohibit the manipulation of or interference with children’s right to thought and belief in the digital environment and to prevent the use of automated systems or information filtering systems to influence children’s behaviour or emotions or to limit their opportunities or development.\(^{29}\)

Right to privacy and data protection

22. Privacy is vital to children’s agency, dignity and safety and for the exercise of their rights.\(^{30}\) Traditionally, however, the privacy rights of children have been regarded as an issue for adults to determine.\(^{31}\)

23. Infringements of privacy by third parties are related to the design of digital systems and arise from automated data processing, profiling and behavioural targeting, mandatory identify verification and information filtering.\(^{32}\) Digital technologies produce a stream of data collected by artificial intelligence, machine-learning applications and facial and speech recognition technologies that can potentially undermine children’s right to privacy.\(^{33}\) Threats to children’s privacy may also arise from data collection and processing by public institutions, for example hospital or

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\(^{27}\) Ibid.


\(^{29}\) Committee on the Rights of the Child, general comment No. 25 (2021), para. 62.

\(^{30}\) Ibid., para. 67.

\(^{31}\) A/HRC/46/37, para. 79.

\(^{32}\) Committee on the Rights of the Child, general comment No. 25 (2021), paras. 40, 67 and 68.

\(^{33}\) A/HRC/46/37, para. 90.
schools, businesses and other organizations, as well as from criminal activities such as identity theft.

24. Profiling activities limit children’s self-development, as behavioural predictions can predetermine their choices. The extent to which children understand the consequences of these activities for their privacy will depend upon the child’s age, maturity and circumstances. Younger children, for example, are particularly vulnerable to targeted marketing, given the persuasive nature of advertising.

25. Children are also at risk of becoming the object of mass technological surveillance, targeted marketing and the everyday use of algorithms to make automated decisions online, including in discriminatory ways. The persistence of data collected presents ethical challenges that will have an impact over the lifetime of the child, with significant implications for their public/digital identity.

Birth registration and right to identity

26. Birth registration is a human right enshrined in the Convention on the Rights of the Child, and investments in digitization have been game changers for several countries, including in the context of emergencies such as the COVID-19 pandemic. Technology has been pivotal in advancing civil registration systems including better data management, and in making them more efficient, inclusive and responsive. Several Governments have enhanced birth registration processes. For example, Bangladesh, Bhutan, the Gambia, Lao People’s Democratic Republic, Mozambique, Namibia, Nepal, Rwanda and the United Republic of Tanzania have utilized digital technologies to enhance civil registration service delivery ensuring more efficient, accessible and accurate registration of vital events. Data protection, privacy, confidentiality, ethics and ensuring the intended and proportionate use of data made available remain critical considerations in any civil registration digitization process.

D. Violence against children

27. The digital environment can include gender stereotyped, discriminatory, racist, violent, pornographic and exploitative information, as well as false narratives, misinformation and disinformation and information encouraging children to engage in unlawful or harmful activities. It therefore has significant potential to increase ways of perpetrating violence against children. In addition, during crises such as the COVID-19 pandemic, children spent more time on digital platforms, which increased risks of online harms.

28. In the digital environment, children face different forms of violence and harm, including cyberbullying and harassment, online sexual exploitation and abuse, exposure to violent and sexual content, the promotion of suicide and self-harm, hate

35 Committee on the Rights of the Child, general comment No. 25 (2021), para. 67.
36 A/HRC/46/37, para. 92.
38 A/HRC/46/37, para. 91.
speech, discrimination, racism and xenophobia, trafficking and smuggling, recruitment into criminal, armed or violent groups, economic exploitation including child labour, marketing of harmful or inappropriate goods and services and fraud and identity theft.43 The Committee on the Rights of the Child has expressed concern on a number of occasions over such forms of violence facilitated by technologies.

29. Particular categories of children can experience increased levels of vulnerability to online harms, including girls, children from poor households, children who are out of school, children with disabilities, lesbian, gay, bisexual, transgender, intersex, queer and other (LGBTIQ+) children, children who experience mental health issues and children from marginalized groups, among others.

30. In a study conducted in 28 countries it was found that, on average, 17 per cent of parents said their children had been victims of cyberbullying; in some countries, the figure was as high as 37 per cent.44 Children have also reported seeing hate messages and violent content online. Results of surveys conducted using the Global Kids Online methodology in 11 countries across four regions from 2016 to 2018, with 14,733 children aged 9 to 17 who use the Internet as respondents, showed that a consistent number of children reported seeing hate messages and violent content online.45

31. Girls and women were more likely to be harassed online than men.46 In some contexts boys appeared to experience cyberbullying predominantly through video games and text messages, whereas girls predominantly experienced cyberbullying through social media; boys were more likely than girls to be perpetrators, or victims who also perpetrate bullying. In addition, lower levels of happiness in life, previous offline and online victimization and lack of social support had potential to increase children’s exposure to negative online content.47

32. Among 14,000 girls and young women from 22 survey countries, 58 per cent of girls reported that they had personally experienced some form of online harassment on social media platforms. Of those who reported harassment, 14 per cent who self-identified as having a disability reported that they had experienced related harassment. Of those who identified as belonging to an ethnic minority, 37 per cent had experienced harassment based on ethnic minority status, and 42 per cent of girls who identified as LGBTIQ+ had experienced related harassment.48

33. Experiences of online harassment and cyberbullying against children have been linked to lower self-esteem, increased use of alcohol and drugs, school non-attendance, poor grades and health problems,49 as well as mental or emotional stress and a feeling of being physically unsafe.50

43 A/HRC/52/61, para. 51.
46 A/74/821, para. 51.
34. Sexual violence against children has been increasingly committed through or facilitated by new information and communications technologies (ICT). Forms of sexual violence facilitated by digital technologies include solicitation of children for sexual purposes and to participate in online child sexual abuse. This can take place, for example, through the live video streaming, production and distribution of child sexual abuse material and through sexual extortion. Digitally facilitated violence and sexual exploitation and abuse may also be perpetrated within a child’s circle of trust, by family or friends or, for adolescents, by intimate partners. This may include cyberaggression, including bullying and threats to reputation, the non-consensual creation or sharing of sexualized text or images, such as self-generated content by solicitation and/or coercion, and the promotion of self-harming behaviours, such as cutting, suicidal behaviour or eating disorders.

35. The distribution, scale and complexity of child sexual exploitation and abuse online has increased in recent years given the increasing number of children connected to the Internet, the greater accessibility of the Internet to the wider population as a whole, developments in technology that have enabled perpetrators to offend without detection and developments that have enabled new ways of accessing children online. Children are increasingly reporting seeing sexual content online, and are experiencing unwanted requests for sexual acts or content and online sexual abuse. There is also evidence of the use of the Internet for trafficking in children for the purposes of sexual exploitation. As at 2019, the International Criminal Police Organization (INTERPOL) child sexual exploitation database held more than 1.5 million images and videos, collectively recording the abuse of more than 19,400 child victims worldwide.

36. Among girls surveyed across 22 countries in 2020, many reported receiving sexual comments or explicit messages, including propositions of transactional sex, receiving sexual or explicit photographs or images, receiving requests to send photographs of themselves, including examples of blackmail, unauthorized sharing of content and/or demonstrating knowledge of the girl’s personal information. Meta-analyses of studies on different forms of violence against children online revealed that 11.5 per cent of survey participants had received unwanted online sexual solicitation, and 8 per cent of adolescents had had a self-made sexual image forwarded without consent.

37. The digital environment has also exposed children to online recruitment and exploitation by non-State groups to engage with or participate in violence.

38. Despite the manifold risks and harms potentially presented by the digital environment, it has also opened up new ways for children to seek help when

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51 A/HRC/49/51, para. 38.
52 Committee on the Rights of the Child, general comment No. 25 (2021), para. 81.
59 Committee on the Rights of the Child, general comment No. 25 (2021), para. 83.
experiencing violence, such as through facilitating access to helplines, hotlines, counselling services and violence reporting systems.60

39. A number of Governments took positive steps to address the protection of children in the digital environment, including through the enactment of legislative, administrative and policy initiatives.61 A number of public and private organizations have worked collaboratively across sectors and borders to address the challenges of online child sexual exploitation and abuse. For example, Governments, industry partners, civil society and intergovernmental organizations have worked through the WeProtect Global Alliance to put in place safeguards and to ensure appropriate responses for children who experienced online harm.62 Similarly, a number of Governments, including Kenya, Türkiye, Uganda and Zimbabwe, have taken initiatives to scale up the quality of criminal justice responses and survivor services for those affected by online sexual exploitation and abuse.

40. Governments across regions have also taken steps to adopt and utilize digital information management services for case management to support child protection actors in both humanitarian and development contexts to manage protection-related data for case management, incident monitoring and programme monitoring. Initiatives have been undertaken by Jamaica, Malaysia, Montenegro, the Philippines, South Africa and Sri Lanka to support positive parenting, including through the use of open-source interactive tools for engagement such as chatbots, online group programmes delivered through messaging services and apps. Digital technology has also been utilized for the purposes of mass digital messaging campaigns through text-messaging and mobile apps in hard-to-reach areas, for example for explosive ordnance risk education and/or related survivor assistance in Myanmar and Yemen. Similar mass messaging digital campaigns have been developed to strengthen community engagement to raise visibility on ending harmful practices, such as child marriage in West and Central Africa and Bangladesh.63

E. Children with disabilities

41. The digital environment provides new opportunities for children with disabilities to engage in social relationships, to access information and to participate in decision-making processes.64 Advances in artificial intelligence can also empower children with disabilities in some contexts: for example, artificial intelligence applications have been developed to isolate a singular voice from a crowd and other ambient noises, which can be used to improve audio captioning on television, as well as hearing aids for children with sensory impairments.65

42. However, children with disabilities face multiple barriers when accessing the digital environment, including inaccessible digital content, inadequate devices and interface designs, insufficient training for teachers and students and limited access to assistive technology.66 Therefore, regardless of connectivity, for children with disabilities inaccessible websites and digital devices can mean exclusion from the services and products that they provide. Usability assessments and improving cognitive accessibility are potential solutions to overcome these barriers.67

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60 A/HRC/52/61, paras. 83–86.
64 Committee on the Rights of the Child, general comment No. 25 (2021), para. 89.
43. Children with disabilities are subject to stigma and discrimination, which can make cyberaggressions against them more likely: for example, a review of 98 studies showed that nearly 38 per cent of children with disabilities were bullied by peers, and 23 per cent experienced cyberbullying. Disability-based hate speech is a growing phenomenon, including online. In addition, children with disabilities, including children with intellectual disabilities, face unique vulnerabilities to sexual exploitation and abuse, including online.

F. Health and welfare

44. Digital technologies have been catalysts for ensuring access to health services and information, as well as diagnostic and treatment services for maternal, newborn, child and adolescent physical and mental health and nutrition. Such technologies have also proven life-saving for children in disadvantaged or vulnerable situations, during emergencies and for children living in remote and/or hard-to-reach communities. Governments across all regions took some positive steps to introduce digital technologies for tele-case management, tele-counselling and/or psychosocial support, continuance and improvement of primary health care, digital learning solutions to support front-line and community health workers, health education, including comprehensive sexuality education, and to improve the quality of care and digital information and data.

45. Through the COVID-19 pandemic response, significant financial investments were made in digitalizing vaccine information and delivery mechanisms to improve the health of children and their families. The multi-agency Digital Health Centre of Excellence (DICE), co-led by UNICEF and WHO, was established in 2021 to provide coordinated technical assistance to national Governments and partners on COVID-19 vaccine delivery. The Centre subsequently evolved to focus on the development of digital health solutions to support not only vaccine delivery but also routine immunization, pandemic response and other health efforts, including health sector digitalization as a whole.

46. In health emergencies, including disease outbreaks such as the COVID-19 pandemic, digital technologies and mobile network platforms can provide children and their families with life-saving information, essential commodities and financial support. Digital messaging emerged during the pandemic as a powerful tool to share life-saving information with communities, deliver stimulus and social benefit programmes through innovations such as “digital wallets”, educate health workers on emerging good practice for protecting themselves and their patients and to collect data to inform policy responses and monitor health services and public perception. As part of broader humanitarian efforts in the health sector, WHO and UNICEF accelerated the use of chatbots via messaging platforms, including in humanitarian contexts, owing to their ability to bring critical, tailored information to vast populations. These efforts were aimed at providing households with children and

70 See Mark Sherry and others (eds.), Disability Hate Speech: Social, Cultural and Political Contexts (London, Routledge, 2020).
Governments with reliable information to tackle disinformation, provide health support and to assess needs.\textsuperscript{74}

47. Children, including adolescents, are increasingly using the Internet to search for information and support on physical, mental, sexual and reproductive health, puberty, sexuality and conception. Adolescents have reported especially wanting access to free, confidential, age-appropriate and non-discriminatory mental health and sexual and reproductive health services online.\textsuperscript{75}

48. Digital platforms also help meet the training needs of mental health specialists, including psychologists, as well as non-specialists such as community volunteers, social workers, general practitioners, nurses and teachers. Digital innovations and tools aimed at young people also facilitate self-guided interventions for children, including through the sharing of skills and techniques to help individuals reduce stress and symptoms of mental disorders and mental health challenges.

49. While technology and digital services have provided opportunities for children to access mental health support, their use can also increase children’s exposure to misinformation, online violence and potential harm to their mental health,\textsuperscript{76} including owing to harmful content and violence between peers. Prolonged screen time with limited supervision has been assessed to increase exposure to material that negatively impacts children’s health, and overuse of digital platforms has been assessed to have negative implications for quality sleep, a factor particularly important for healthy brain development in early and middle childhood, as well as adolescent years.

50. Discriminatory content and underrepresentation or misrepresentation of minority groups online has also been assessed to negatively impact children’s mental health and well-being outcomes.\textsuperscript{77}

51. Many low- and middle-income countries have taken initiatives for the provision of mental health services and psychosocial support for children in response to the mental health crisis sparked by the pandemic. Dozens of countries, including Cambodia, Guatemala, Lesotho and Nepal, are adapting and/or scaling up mental health and psychosocial support services for children, including, specifically, adolescents and girls. Such efforts have included psychosocial counselling through mobile and remote services.

52. Digital engagement can also harm the youngest children’s right to survival and development, affecting the cognitive, social, emotional and physical development of children under 5 years of age. This is particularly true in emergencies where several overlapping toxic stresses impact on children and families. Studies have linked excessive Internet use in early childhood with lower cognitive functioning, decreased verbal intelligence and reduced volume in areas of the brain related to language processing, attention, executive functions, emotions and reward. Increased screen time has also been linked to rising obesity rates among young children, attention deficits and aggressive behaviour.

\textsuperscript{74} Office for the Coordination of Humanitarian Affairs, From Digital Promise to Frontline Practice: New and Emerging Technologies in Humanitarian Action (2021).
\textsuperscript{75} Committee on the Rights of the Child, general comment No. 25 (2021), para. 94.
\textsuperscript{76} OECD, “Children and young people’s mental health in the digital age: shaping the future”, (2018).
53. In guidelines issued in 2019, WHO recommended no screen time for babies under two, and no more than one hour of screen time a day for those aged 2 to 4 to support positive neurological development in early years.78

54. While risks of digital engagement have been identified for the youngest children, in small doses it has been found to have some potential benefits for children over 2 years of age, such as to further the development of fine motor skills, boost the cognitive and psychosocial development of children aged 3 to 5 years, support digital literacy and provide opportunities for digital play. Parental and caregiver engagement has been found to play a critical role in mediating digital engagement for the youngest children, as well as in modelling healthy behaviours and digital literacy.

55. The digital marketing of unhealthy foods and beverages to children has increased worldwide, including in low- and middle-income countries. Such marketing can be highly targeted, making it effective at influencing children’s food preferences and leading to poor diets that can result in overweight, obesity and diet-related chronic disease.79 Approximately 40 million children under the age of 5 and more than 340 million children and adolescents aged 5 to 19 live with overweight or obesity, primarily driven by an obesogenic food environment.80 A number of States have taken measures to improve early childhood and adolescent nutrition, including China, India, Mexico and Uruguay.81

56. The Committee on the Rights of the Child has noted that the food industry spends billions of dollars on persistent and pervasive marketing strategies that promote unhealthy food to children and has called on States to regulate such strategies as part of their obligations under article 24 of the Convention on the Rights of the Child, more recently with a specific focus on digital marketing. In the specific context of the digital environment, the Committee has also called on States to make the best interests of the child a primary consideration when regulating advertising and marketing addressed to and accessible to children.82

G. Education, leisure and cultural activities

57. Amid the global learning crisis and the COVID-19 pandemic, technology-enabled remote learning became a lifeline for many children.83 Governments around the world have been quick to implement remote learning measures, and a mapping of national digital learning platforms from more than 180 countries revealed that 91 per cent of ministries of education surveyed online platforms utilized for remote learning. However, it also revealed that many countries did not have officially authorized digital learning platforms and content, and many learners did not know where to access digital educational solutions or resources.84

58. Among the different remote-learning modalities used in the education response to the pandemic basic tech-enabled solutions, such as mobile telephones and

78 WHO, Guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age (2019).
82 See Committee on the Rights of the Child, general comment No. 15 (2013) on the right of the child to the enjoyment of the highest attainable standard of health and general comment No. 25 (2021).
83 See A/76/305, paras. 25–28.
smartphones, were especially instrumental in enabling continuity of learning and maintaining a channel of communication between students and teachers. Popular messaging tools were frequently used to support continued learning, with usage of some tools growing more than 40 per cent during the pandemic.\(^{85}\)

59. Since school closures during the pandemic led to children being confined to their home environments, where there was a greater reliance on technology such as mobile phones and online platforms, there has been a consequent rise in screen time. Technologies, the Internet and digital tools have acted as a gateway to learning, but also to the world of play and entertainment, social interactions that children were missing, engagement and creativity.

60. Despite national efforts during the pandemic, however, hundreds of millions of learners were not able to access digital learning content or receive remote support from their teachers owing to digital and usage divides. Thus, a lack of readiness and vision for digital and remote learning has been exposed across the globe. This is evidenced through the absence or shortage of appropriate infrastructure, connectivity, policies and programmes, digital learning solutions, educational content and resources and guidance and support mechanisms for schools, teachers and families, as well as the lack of digital literacy and skills among students, teachers and caregivers.

61. The digital divide is especially pronounced for girls, children with disabilities, children living in rural areas, children in emergency contexts and for ethno-linguistic minorities. The pandemic’s negative effects on education were disproportionately felt in low and lower middle-income countries.\(^{86}\)

62. However, even in technologically advanced countries, teachers were not equipped with the skills required to respond to the sudden demand and need for remote learning modalities, in particular for digital learning solutions. Many Governments made significant efforts during the COVID-19 pandemic to provide teachers with information and communications technology training and remedial support; 53 per cent of teachers reported that they had participated in training on using technological tools and resources for online or remote teaching and learning. However, 25 per cent of teachers surveyed reported that inadequate use of digital technology for teaching was a hindrance to quality instruction.\(^{87}\)

63. The UNESCO-developed ICT Competency Framework for Teachers provides support in informing teacher training policies, as well as assisting countries in developing national ICT competency for teachers.\(^{88}\)

64. As at 2022 only an estimated one third of 10-year-olds were able to read and understand a simple text.\(^{89}\) A mapping by UNICEF and EdTech Hub of national digital learning platforms from more than 180 countries demonstrates that progress on digital learning platforms had stalled or even backtracked, and that offline functionalities, accessibility features and basic interactivity were lacking. Of identified national digital learning platforms, 32 per cent no longer exist, have not been updated since 2020 or have links that do not work. This is especially prevalent for platforms developed by countries based in sub-Saharan Africa and South Asia. More than 70 per cent of platforms do not offer offline functionality. Forty-nine per cent of high-income

\(^{85}\) Ibid.
\(^{86}\) Ibid.
\(^{87}\) Ibid.
\(^{89}\) UNICEF, “UNICEF warns of shockingly low levels of learning, with only a third of 10-year-olds globally estimated to be able to read and understand a simple written story”, press release, 16 September 2022.
and 33 per cent of middle-income countries have platforms which offer offline functionality, while only 18 per cent of low-income countries offer this. Furthermore, only 22 per cent of digital learning platforms contain accessibility features for children with disabilities. The digital literacy of children, teachers, parents and caregivers, as well as other stakeholders, remains a considerable gap and concern.\(^\text{90}\)

65. As at 2021 2.9 billion people are still offline. To address the connectivity divide, UNICEF and the International Telecommunication Union have partnered at the global level to connect every school in the world to the Internet by 2030 as part of the Giga initiative,\(^\text{91}\) which, as at 2023, has already helped more than 1 million students and 3,200 schools gain access to the Internet.\(^\text{92}\)

66. In the face of ongoing challenges, Governments across all regions have made efforts to strengthen equitable access to digital learning solutions and connectivity, including for example in relation to digital skills and literacy, teacher and school-leader capacity-building, addressing the digital divide, improvement of pre-primary content and services, the fostering of alternative pathways to learning and the development of accessible digital material and textbooks. The Learning Passport, an online, mobile and offline learning platform developed by UNICEF and Microsoft to address challenges to accessing continued, quality education, especially for those affected by crisis and displacement, reached nearly 2.8 million children, young people, educators and caregivers with educational content in more than 28 countries by the end of 2022.\(^\text{93}\)

67. Based on the Secretary-General’s Road Map for Digital Cooperation and the Rewired Global Declaration on Connectivity for Education,\(^\text{94}\) UNICEF and partners at the Transforming Education Summit in 2022 launched a call to action on assuring and improving quality digital public education for all\(^\text{95}\) and the flagship initiative Gateways to Public Digital Learning, which is aimed at supporting countries in their commitments to develop digital learning platforms and content.\(^\text{96}\)

68. In the scope of the Transforming Education Summit,\(^\text{97}\) the Office of the Secretary-General’s Envoy on Youth and the Summit secretariat gathered the views, recommendations and commitments on transforming education from almost 500,000 young people from more than 170 countries, culminating in the first-of-its-kind Youth Declaration on Transforming Education.\(^\text{98}\) In the Declaration, decision makers are urged “to invest in the digital infrastructure of education and affordable, dignified, safe and stable access to digital connectivity for all, to aid learning and close the digital divide”.

### IV. Recommendations

69. In line with the Committee’s general comment No. 25 (2021), States are urged to respect, protect and fulfil the rights of every child in the digital

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\(^\text{91}\) See [https://giga.global](https://giga.global).


environment without discrimination of any kind, including on the basis of sex and gender, disability, socioeconomic background, ethnic or national origin, language, indigenous or minority status, migrant or refugee status, and to overcome digital exclusion, including by providing free and safe access for all children to digital technologies. Specific attention should be paid by States to the situation of children in disadvantaged situations, including on the basis of gender, children affected by humanitarian crises, children who are victims of trafficking or sexual exploitation, children in alternative care and children deprived of liberty.

70. States, the private sector and other relevant actors should ensure that all legislation, policies, programmes and practices, as well as the design of products and goods related to the digital environment are in line with international human rights standards and child rights principles, including by taking the best interests of every child as a primary consideration, applying age-appropriate approaches and ensuring children’s meaningful participation by consulting with them during the development process, listening to their needs and giving due weight to their views. States should systematically involve civil society, including child-led groups and non-governmental organizations working in the field of children’s rights and those concerned with the digital environment in these efforts.

71. States, the private sector and other relevant actors are strongly encouraged to take all appropriate measures to protect children from violence in the digital environment, including physical and psychological violence, injury or abuse, neglect or maltreatment, cyberaggression, trafficking and harassment, exposure to violent or otherwise harmful content, exploitation and abuse, including sexual exploitation and abuse, bullying and hate speech.

72. States should allocate and utilize public resources to implement legislation, policies and programmes to fully realize children’s rights in the digital environment and to improve digital inclusion, including specific measures to close the gender-related digital divide.

73. States are strongly encouraged to ensure the collection of comprehensive data disaggregated by age, sex and gender, disability, geographical location, ethnic and national origin and socioeconomic background, including data and research conducted with and by children, to inform legislation, policy and practices related to the digital environment.

74. States should ensure that the mandates of national human rights institutions and other national independent institutions include children’s rights in the digital environment and that they are adequately resourced and entrusted with the powers to receive, investigate and address complaints from children and their parents, caregivers and representative organizations.

75. States and other relevant actors are urged to disseminate information and conduct awareness-raising campaigns on children’s rights in the digital environment, facilitate educational programmes for children, parents and caregivers to enhance their knowledge of children’s rights in relation to the opportunities and risks associated with digital products and services – including in relation to the risks of misinformation and disinformation, ensure information is available in child-sensitive and age-appropriate modalities, and provide training for professionals working for and with children, including the technology industry, focusing on the digital environment and children’s rights. Parents, educators and other relevant actors should receive training and advice on the appropriate use of digital devices and on the need to respect children’s
evolving autonomy, capacities and privacy. Specific attention should also be given to the mental health and psychosocial well-being of children.

76. States should ensure that the business sector respects children’s rights in the digital environment and takes appropriate measures to ensure compliance with obligations to prevent violations of children’s rights. States should ensure that the business sector undertakes child rights due diligence and child rights impact assessments, and implement regulatory frameworks, industry codes and terms of services that uphold the highest standards of ethics and safety.

77. States are urged to ensure that appropriate and effective remedial judicial and non-judicial mechanisms for the violations of children’s rights relating to the digital environment are in place, available and accessible to all children and their representatives, and provide specialized training for law enforcement officials, prosecutors and judges regarding child rights violations in the digital environment.

78. States, the private sector and other relevant actors are strongly encouraged to ensure that children have access to information in the digital environment and support the creation of age-appropriate digital content for children in accordance with their evolving capacities, including by involving bodies such as media, broadcasters and educational, scientific and cultural organizations, as well as those providing protective and health services.

79. States should protect children who express their political, religious or other views and identities in the digital environment from cyberaggression, threats, censorship and digital surveillance. States should ensure that their laws and policies protect children’s right to participate in organizations that operate in the digital environment, and enable children, including child human rights defenders and children in disadvantaged situations, to safely advocate for their rights and to form associations.

80. States have the obligation to ensure that children’s privacy is respected and protected by all organizations and individuals who process their data, including the adoption of safeguards, transparency measures and independent oversight, and the integration of privacy-by-design into digital products and services, that prior and informed consent is given freely by the child and/or by their parents or caregivers whenever needed to process data, and that children and their parents and caregivers can easily access stored data and rectify it or delete it if inaccurate, outdated or unlawfully stored.

81. States should promote the use of digital identification systems, with due regard to children’s privacy and data protection rights, that enable all children to have their birth registered and officially recognized by national authorities to facilitate access to services, especially for children in remote areas, refugee and migrant children and the most marginalized children.

82. States should promote opportunities for parents and caregivers to gain digital literacy and learn how technology can enhance the rights of children, as well as recognize how technology poses risks to young children’s development, and how to recognize a child who is a victim of harm and respond appropriately, with special attention to be given to children and parents and caregivers from marginalized groups.

83. States are encouraged to regulate targeted or inappropriate advertising, marketing and other relevant digital services to prevent children’s exposure to the promotion of unhealthy products, including food and beverages, alcohol, drugs and tobacco and other nicotine products. States should make the best interests of the child a primary consideration when doing so.
84. States should support educational and cultural institutions in enabling access for children to diverse digital and interactive learning resources in languages understandable by all children and invest equitably in technological infrastructure in schools and other learning settings, ensuring the availability and affordability of computers, high-quality and high-speed broadband and source of electricity.

85. States, the private sector and other relevant actors are strongly encouraged to ensure that digital technologies, artificial intelligence, and surveillance mechanisms, such as facial recognition software and risk profiling, including those that are deployed in the prevention, investigation and prosecution of crimes, are not used to unfairly target children suspected of or charged with criminal offences.

86. States have the obligation to ensure that children are not recruited or used in conflicts, including armed conflicts, through the digital environment, including by preventing, criminalizing and sanctioning the various forms of technology-facilitated solicitation and grooming of children.