Leading Article

Impact of Digital Technology on Child Health

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Digital technologies are being used widely by children and increased rapidly over the past decade, raising important questions that how time spent on digitally-mediated activities may affect children in positive or negative ways. Digital technologies have profoundly changed childhood and adolescence behavior. The internet and the means to access it, such as smartphones and tablets, along with social media platforms and messaging apps, have become integral to the lives of youth around the world. They have transformed their education and learning, the way they make and maintain friendships, how they spend their leisure time, and their engagement with wider society. Digital technologies are now embedded in our society. Focus has shifted from whether or not to use them in teaching and learning, to understanding which technologies can be used for what specific educational purposes and then to investigate how best they can be used and embedded across the range of educational contexts in schools. Young children are using digital technology (DT) devices anytime and anywhere, especially with the invention of smart phones and the replacement of desktop computers with digital tablets. Although parents play an important role in fostering and supporting preschoolers' developing maturity and decisions about DT use, and in protecting them from potential risk due to excessive DT exposure. Cyberbullying is carried out using electronic communication, including through the internet, social media and mobile phones. It can take the form of many behaviors, including: harmful messages; impersonating another person online; sharing private messages; uploading photographs or videos of another person that leads to shame and embarrassment as well as excluding people from online groups.

The connection between technology and learning is found fairly consistently a stronger association. The ICT Test Bed evaluation identified a link between high levels of ICT use and improved school performance. Collaborative use of technology (in pairs or small groups) is usually more effective than individual use, though some pupils, especially younger children, may need support in collaborating effectively. Young people who lack digital skills, live in remote regions, or speak a minority language are also being left behind in harnessing the opportunities that digital technologies can provide. The benefits include access to education, training and jobs, which can help break intergenerational cycles of poverty and access to news and information sources that can help protect their health, safety and rights. Health can be viewed from the perspective of wellbeing, a multidimensional construct according to which quality of life is framed in terms of physical, emotional, mental, social and behavioral components. Media use has a two-sided coin that may affect both physical and psychological health. This special issue takes into account the fact that the young population is no longer exposed only to one traditional medium, i.e., TV. The boom in electronic devices has expanded the number of attractive screen-based activities, which brings new challenges in how to monitor total screen time and disentangle the potential effects of each device on physical functioning. Computers have become an indispensable element in children's lives. Spending too much time on the computer from an early age can negatively affect academic success due to the low concentration, lack of attention and disorganization, undeveloped language skills, creativity and imagination seen in children as a result of excess computer use. The children engaged with their smartphone during school negatively affect both own and their classmates' attention. Easy access to illegal, violent, and sexual content, communication with dangerous people, and excessive dependence on games constitute only a few of these significant risks. Although much has been written about the effects of video games on children and adolescents. An increased use of smartphones has been reported

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to be associated with passive aggressive, unprotected, socially incompatibility, obsession, addiction and anxiety.

Young people are not only at risk from adult exploitation; children can also obtain sexual or intimate photos of a peer and share them with or without the individual's consent. Digital advances have meant that bullying is no longer left at the school gates; cyberbullying hurts and humiliates their victims with the click of a button. Words and images posted online that are designed to cause harm are also difficult to delete, increasing the risk of re-victimization. Concerns have also been raised about the time children spend using digital technology and its effect on their physical activity and mental health. Schools are also an important forum for discussing cyberbullying, and anti-bullying programmes need to include online harassment. Risks that could be encountered online:

- one in ten children to one in five young teens encountered something worrying or nasty online;

- children's top worries are pornography and violence; they encounter these most often on video-sharing sites, followed by other websites, then social networking sites and games;

- children are also concerned about the levels of advertising online, their spending too much time online, inappropriate contacts, rumours and nastiness; and top parent concerns include online violence.

Children and adolescents have the most to gain and are most at risk from digital technologies. They must be at the forefront of national and global digital policies, not only to protect them from online harm but also to allow technology to help them fulfil their full potential.

Preschool children's cognitive and functional abilities are still in the developmental stage, parents play a crucial role in fostering appropriate and safe DT use. It is suggested that parents practice a combination of restrictive, instructive and co-using approaches, rather than a predominately restrictive approach, to facilitate their child's growth and development.

The developmental impact of passive and interactive screen time exposure in infancy and early childhood. Excess screen time exposure by children can cause physical and mental problems like headache, neck/shoulder pain, eye strain, reduce attention span, poor behavior, irritability and sleep disturbances. According to the American Academy of Pediatrics, Screen Time Guidelines recommends for children younger than 24 months, avoid use of screen media and for children aged 2 to 5 years, screen use should be limited to 1 hour per day of high-quality programs.

Finally, children use digital technology for specific reasons and are often able to articulate why they do it. Sometimes these reasons may not seem optimal from an adult point of view, but it is important to take their opinions and explanations seriously, even if we disagree. Children are in many ways the pioneers and experts in this area, often the first to try new applications and programs; sometimes even creating their own. It is necessary to adjust the situation and build constructive discussion around healthy and harmful uses of digital technology in the family, school, and society at large. We will most likely need to rely more on children's voices and experiences, at the same time provide them guide to adopt appropriate digital technology.

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