Short Communication

Choosing a Healthy Childhood Development in the Digital Era

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Digital technology use is predominant amongst children and as the use increases, it significantly impacts childhood development [1]. Technology is entrenched in our work, play and learning, thus making it difficult in avoiding the use of gadgets such as tablets and phones. After all, we are in the Fourth Industrial Revolution era and the COVID-19 pandemic has accelerated technology adoption and acceptance. Communication has been digitized and it seems this is the only way to make our social circles bigger. The schooling system is now transitioning to Technology Enhanced Learning. Even more so, the virtualization of the workplace has normalized spending a significant amount of time online. Nonetheless, in pre-pandemic times, this growing use was still inevitable. The use of digital gadgets has also crept into the home system with children as young as a few months old being exposed beyond the recommended screen time. Henceforth, our article will address the overarching goal of the World Health Organization (WHO) guidelines on physical activity, screen time exposure and sleep for children; coupled with active internet use and offline digital use [2].

Digital technology use has both positive and negative impacts on the development of the child [3]. On a positive note, this includes, improving digital literacy skills through exposure as well as the ability to play and learn using the various gadgets available. By the same token, digital platforms also serve as an opportunity for anti-social children to create relationships. Not every child can make friends in outdoor social settings. The downside of digital use can be grouped as affecting three developmental components of the child: psychological, mental, and behavioural characteristics [4]. Also, digital use compromises cognitive growth and development among young children, and it increases the chances of myopia, anxiety, depression, attention deficits, learning problems and poor sleeping habits. An association between these adverse health outcomes and mobile phone use was identified, especially among children who reported screen time of more than 6 hours a day [5]. Some researchers cite a negative impact on the language and communication aspect of the child's development [4]. Notwithstanding that it enables cyber-bullying and exposure to inappropriate content.

Stiglic and Viner [5], as well as the Organization for Economic Co-Operation and Development (OECD) [6], echo the use of digital technology as relevant and important for this day and age. It is a matter of striking a balance between the benefits and possible harms. Parental supervision and the monitoring of the amount of time spent on gadgets is critical and is in the best interest of the child. It is recommended that the age of exposure to these gadgets should be delayed as suggested by WHO, to protect the child's development.

Given that digital technology use can also have a positive impact, as 1-2 hours a day of internet use is associated with the highest life satisfaction [6]. On the other hand, more than 2 hours of screen time is associated with low quality of life; although the impact of the screen time varies across research literature [4,5]. WHO went to an extent of ensuring the greatest health benefits of screen-time for children under the age of five. Similarly, the American Academy of Paediatrics recommended less than 1 hour a day of screen time for all children. While Korea has identified this as a critical issue, hence there is legislation that prevents children from internet usage between midnight and 6am [6]. This is vital for the cognitive development and psychosocial well-being of children. Moreover, boredom can be a gift rather than a curse when the use of gadgets is limited because it stimulates imagination, creativity and problem solving. This simply means, when a child is bored, instead of using gadgets to pass time, alternatively it allows the child to interact with the physical environment. Children should be allowed to connect to nature and be able to dream instead of one-way consumption of digital content.

Even the Silicon Valley tech executives like Bill Gates, Sundar Pichai and the late Steve Jobs emphasized the importance of screen time supervision and monitoring [7]. It is also reported that some of their nannies work on a no-technology contract basis, to avoid the influential behaviour of nannies' digital habits towards the children [8]. On the other hand, in the United States of America, St. Louis, Missouri, a program called "Parents as Teachers (PAT): Using Virtual Technology in Service Delivery to Children and Families who are Vulnerable" focuses on working with both parents and children whilst using gadgets to help improve child development [9]. The same platform is used to build social support between families in the comfort of their homes using their own devices. The PAT's educational interventions help children perform significantly better academically, while at the same time, assisting in improving parental qualities and health outcomes. Screen time is identified as a poor mental health risk factor in children. It is not surprising that most tech executives closely supervise their children's screen time within the recommended 1 hour a day.

The use of digital tools is a double-edged sword, it greatly benefits digital literacy, however, it also trades off creativity and critical thinking, which are both ranked as top skills of the future. Unregulated screen time compromises the child's mental wellbeing and social functioning in the real world. We are humans and interacting with

one another forms part of our being. The idea is to play with both sides of the coin; using smart ways to receive the benefits while limiting harmful exposure. Parents also need to be reminded that not everything that is animated is child-friendly. Therefore, parental supervision and monitoring are essential for achieving healthy childhood development, alongside reduced screen time. The use of these gadgets should be intentional, whether for entertainment and education purposes, but not as a parenting tool. Policymakers and the society have a moral responsibility of ensuring a healthy development and wellbeing of children in the digital era.

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