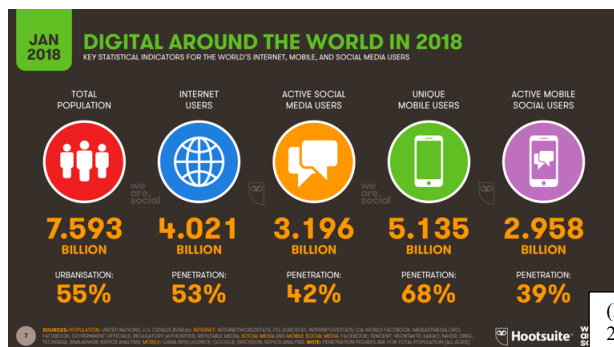


Is technology a contributing factor to a more toxic childhood for our 21st century children and young people?

INTRODUCTION

Technology usage has certainly increased dramatically over the last 10 years and it inevitably is spilling over more and more into the lives of today's children and young people. As this spills over more and more the age of when children first get involved with technology has dropped significantly. As one of the statistics from Straker's article suggests; "98% of homes in the US with young children had a mobile touch screen device in 2017, compared with just 52% in 2011" (Straker et al, 2018). This figure is now shockingly high and has almost doubled in just six short years. Also see diagram below which was taken from a report called 'Digital in 2018' which also shows key statistical indicators for the world's internet, mobile phone and social media users.



This is undeniably a controversial issue as to whether the increase in technology within our children's lives is a 'good' thing or not and there is much conflicting advice and documentation to be had but none of which seems to give a clear stance on the matter. Technology and screen usage is everywhere; from television to tablets and Ipad, games consoles and of course social media. Has our society made childhood today toxic by its dramatic increase of modern technology? Sue Palmer evidently believes that this is the case and her book titled 'toxic childhood' explains in detail how it is toxifying our children but also advice on how we can go about 'detoxifying' their childhood.

"All is not well for children in the wealthy west, particularly the UK and USA.....a UNICEF survey of childhood well-being in the developed world confirmed that these two countries do indeed have particular issues" (Palmer, 2015).

A substantial number of kids and youngsters today possess no less than one technological item, for example, a mobile phone, games console, tablet or PC / laptop and often several items. "UK children had a phone by age seven, an iPad by age eight, and a smart phone by age ten.....the average child will have their first games console by age eight, and a laptop by the time they hit double digits" (Barnette, 2016). This statistic was taken from an inews article written by Adam Barnette in 2016 and it is somewhat shocking to see children of such a young age owning these electrical gadgets.

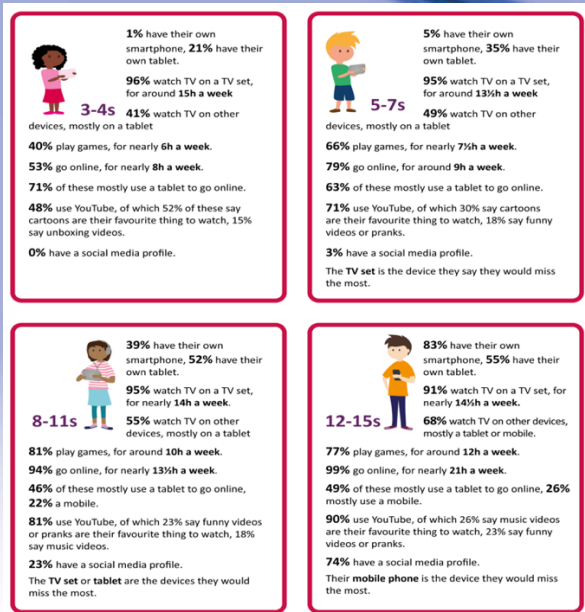
However, given the way in which our world is advancing technologically it is imperative for the children and young people to have some technology skills for their future prospects as technology's advancement has made it a necessary quality to have to progress through life. For example: even applying for jobs is mostly done online and through email and if you want to apply for any benefits it is generally done through online application forms. Even something as simple as online shopping, our children and young people would certainly benefit from having some basic technology and computer skills. Professor Brown (2013) clearly agrees as he says, "children need access to technology if they want to succeed in the 21st century with so many of the world's transactions done over the internet". That's not to say that digital technology should replace the conventional learning that takes place within a classroom but if it is used effectively it can complement and enhance our children's learning and education. "The latest technology can help create opportunities for more active and meaningful learning experiences" (Brown, 2013).

Positives and Negatives of digital technology in childhood

There are many positive aspects to being digitally competent for the children and young people of today, some of which Straker (2018) says are; “enhancing learning, promoting children’s digital skill set, engaging in STEM (i.e., Science, Technology, Engineering and Mathematics), ensuring productive workforce membership, enabling competition in a globalized economy, and creating competence in social interaction”.

There are many educational apps and games aimed at children which help enable them to have fun and enjoy whilst they are learning. Some of these apps are the reason many children as young as three years of age begin school with a good basic knowledge of simple mathematics and language skills. Many of these apps and games are designed to help their hand - eye coordination, boost their vocabulary and also to contribute to a child’s problem-solving skills. They also assist to construct their fundamental mathematic abilities by saturating them with the limit with regards to quantitative thinking. This surely can only be a good thing if our children and young people are enhancing their learning at an even younger age thanks to the help of modern technology. There are also apps which can be used with children who have additional learning needs and or non-verbal for example: ‘Proloquo2Go’ which is an augmentative communication application that uses pictures to communicate with the option of text as well and or voices to speak out the chosen action. Also ‘Children with autism: A visual schedule’ which helps an autistic child to keep routine and know what is coming next so nothing unexpected happens and knocks them out of sync.

Modern technology also gives children and young people access to a huge wealth of knowledge and information which so long as used correctly and effectively is invaluable. Traditionally children would have learned from their teachers, parents, books etc. whereas now the internet gives them this amazing tool at their fingertips and allows them the freedom to discover new things. The advances in modern technology give our children and young people an easy and effective way of keeping in touch with friends and family and helps to support friendships and encourage social interaction even when they are not with their friends in person.



(Ofcom, 2017)

The image above is from the children and parents; media and attitudes report 2017, which was carried out by Ofcom. It shows clearly some scarily high statistics regarding children’s ages, how many own certain gadgets and how often they use them for. The use of television remains fairly consistent over the age groups and the amount of time it is watched for per week only fluctuates between the age groups by an hour. Although the percentage that go online and the amount of time spent online per week increases with age, it still shows that over half of 3-4 year olds are spending around 8 hours a week online. This may at first appearance seem a lot, but many young children play educational apps online thinking they are ‘having fun’ and ‘playing games’ whereas in actual facts they are but they are also learning at the same time. Social media profile prevalence increases as children get older. The majority of these sites have a minimum age policy such as Facebook, snapchat and Instagram, for all of which the minimum age is 13 years old. However, these statistics clearly show that almost a quarter of 8-11 year olds already have an account and although a very low percentage even some children as young as 5-7 years old have a social media profile. Owning a smart phone appears very popular in the older age group but there is still a small minority who own one even as young as 3-4 years old. The parents are the ones providing the access and these gadgets and although technology skills are extremely important what is also vital is teaching our children and young people the do’s and don’ts of technology and of course online safety.

Having mentioned briefly some of the advantages of modern technology for children and young people there are also some disadvantages associated with over use and or unsupervised use. Some of these include;

- Cyberbullying
- Exposure to unsuitable content
- Online grooming
- Lack of or poor sleep patterns
- Poor diet
- Decrease in physical activity
- Mental health and loneliness

Mental health and loneliness.

A BBC news article titled 'Is social media causing childhood depression?' states; "social media is a contributing factor in teenage depression, anxiety and other mental health issues. These problems are often complex and wide-ranging - from excessive use of gaming or social media sites to feelings of inadequacy brought on by a constant bombardment of social media images of other people's lives, to cyber-bullying" (Wakefield, 2018). Social media and online activity and gaming can become addictive and thus you get engrossed in this online almost fictional world and block out the immediate people and environment that surrounds you. Technology can be a fantastic tool for helping children to be social with friends and family far away however there is a danger of isolating themselves from their immediate friends and family and also that if their social life revolves around everything online when they are faced with face to face interactions, they may well be lacking in the social skills necessary. Without having the necessary social skills to interact, children and young people may avoid these situations as they feel they lack the competency to deal with them and rely more and more on online interactions as that is what they are most comfortable with. Carter (2018) believes "the effect of loneliness is associated with both increased device use, and poorer sleep, as bored children turn to their device for companionship". Furthermore Ndasauka (2016) is also of the same opinion stating; "greater loneliness traits have been reported in those children with the greatest intensity of device usage".

Recommended Amount of Sleep for Pediatric Populations*

Age	Recommended Sleep Hours per 24 Hour Period
Infants: 4 to 12 months	12 to 16 hours (including naps)
Toddlers: 1 to 2 years	11 to 14 hours (including naps)
Preschoolers: 3 to 5 years	10 to 13 hours (including naps)
Gradeschoolers: 6 to 12 years	9 to 12 hours
Teens: 13 to 18 years	8 to 10 hours

*The American Academy of Pediatrics (AAP) has issued a Statement of Endorsement supporting these guidelines from the American Academy of Sleep Medicine (AASM).
Source: Paruthi S, Brooks LJ, D'Ambrosio C, Hall W, Kotagal S, Lloyd RM, Malow B, Maski K, Nichols C, Ouan SF, Rosen CL, Troester MM, Wise MS. Recommended Amount of Sleep for Pediatric Populations: A Statement of the American Academy of Sleep Medicine. J Clin Sleep Med. 2016 May 25; pii: j-c-00158-16. PubMed PMID: 27250809.

Poor sleep patterns or lack of sleep.

Sleep is incredibly important for children's health and development and ensuring our children and young people not only have an adequate amount of sleep but also have a good regular sleep pattern; this is of paramount importance to their health and well-being as well as their development. From looking at the above chart for the recommended amount of sleep a child should have it averages out at around 12 hours. This of course depends on the age of a child and also can vary depending on the individual and their needs. This is only the recommendation and a guideline, and each child is different.

Technology and electronic equipment such as televisions, games consoles, tablets and mobile phones are finding their way more and more into children's bedrooms which is being provided usually by the parents. A bedroom should be an area for relaxation, somewhere quiet to unwind before getting into bed and going to sleep. Unfortunately, this is not the case and many children and young people are left to fall asleep with constant noise and or flashing, bright lights from screens. "Recent evidence has pointed to device use (or merely access) being linked to poorer sleep quantity, and quality, even when the devices are not being used, but were present in the bedroom" (Carter, 2018). In a survey carried out in the early 2000's it showed that up to 80% of over five year olds had a television in their bedroom, "with computers and other equipment not far behind" (Palmer, 2015, p.103). The staggering numbers of children and young people with these electronic devices in their bedrooms and at such young ages is clearly having an impact on their sleep and sleep patterns (as Carter, 2018 suggests above). This in turn will affect their well-being and possibly their mental health.

Lack of physical activity and poorer diet.

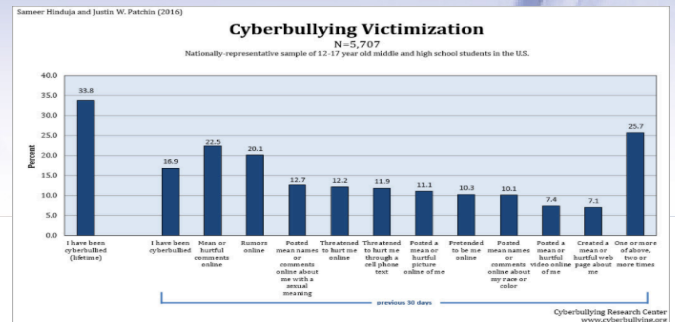
The use of technology and the electronic gadgets which appear to be taking over the lives more and more of children and young people today patently links to a decrease in physical activities. As Barna (2017) suggests “most of the after-school activities of children involve technology”. Several decades ago the ‘norm’ would have been for children to come home from school and go straight out to play whereas now the ‘norm’ tends to be going to their rooms to play on their games consoles or sat surfing the internet and or social media. Barna goes on to say a substantial majority of children, almost two thirds watch television or films after school, just under half play on their video consoles and over a quarter spend time messaging with their friends or on social media. These statistics came from a large group of US families who answered surveys in 2016 on their children’s (between ages 4-17) after school activities. The more time children and young people spend using technology such as consoles, tv’s, tablets and smart phones the less time or inclination they have to part take in any kind of physical activity. This in turn is contributing to a separate issue of childhood obesity. “Screen time is associated with an increased risk of cardio-metabolic diseases, overweight, and a large range of physical and psychological disorders in children and adolescents” (Braig et al, 2018). The journal article goes on to state how extensive screen time can affect ones self-esteem and could then contribute to their mental health and or well-being.



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Cyberbullying.

The way in which our world is becoming increasingly technology centered is providing our children with many advantages. However, this doesn’t come without its disadvantages and one of these huge disadvantages currently is cyberbullying. This is becoming a serious issue for our children and young people of today and as adults and professional child practitioners it is something, we all need to be more aware of in order to try and fight this.



Cyber bullying involves using various technological equipment such as smart phones, tablets or PC's and using the internet or messaging to bully and harass other individuals. This can be done in various ways for example; insulting or mean messages, spreading rumors online, posting others pictures without their permission intentionally to cause upset, hacking into others accounts and purposefully sending damaging messages, messaging and pretending to be somebody else and 'sexting' or sending sexually explicit content intentionally to harm or upset another person. This new term sexting is defined online in the etymology dictionary as; “the sending of sexually explicit digital images, videos, text messages, or emails, usually by cellph -one” (Harper, 2010). It may to some children and young people seem harmless, but any form of cyberbullying can have devastating consequences for some individuals and even cause someone to take their own life. The above graph which was produced by the cyberbullying research center in 2016 indicates the prevalence rates of the number of 12-17 year olds in the US (this was the studies sample age group) who have been bullied in their lifetime, within the last 30 days and by what methods. Over a third had been cyberbullied during their lifetime and almost a fifth had experienced cyberbullying during the last 30 days. These figures are shocking and just are not acceptable!

Cyberbullying continued.....

From studies that currently exist, Floreno (2011) says statistics indicate that “42% of teenagers report having been cyberbullied”. These statistics vary from study to study depending on what age range was researched and also the participants perceived definition of cyberbullying. Also, not all children or young people feel able to admit to being cyberbullied, possibly due to being scared or ashamed. “One study done in the United Kingdom surveying 770 children indicated that 20% had been cyberbullied or threatened, and a Canadian study revealed that out of 264 students, approximately 25% had reported being victims of cyberbullying” (Slonje & Smith, 2008). These numbers are scary and only on the rise as an article released in the Guardian in 2014 by Nadia Khomami also suggests; “The number of children and young people tormented by online trolls has increased by 88% in five years, according to a report by a leading children’s charity”. Cyberbullying can have awful consequences for the recipient. It can lead to them becoming;

- Unhappy
- Emotional
- Withdrawn
- Anxious
- Depressed
- Self-harming
- Suicidal

For some recipients of cyberbullying they just feel they have no way out, no way of making it stop and unfortunately feel they have no other option but to end their life.

“Wolfson (2010) reports that although 44 states in the United States have an anti-bullying law, only five states have an anti-cyberbullying law and victims of cyberbullying are twice as likely to attempt suicide. In addition, youth who are cyberbullied often experience fear in school” (Wolfson, 2010 cited in Morgan, 2013). Cyberbullying is an increasingly imperative issue and we need to put a stop to the way in which society is allowing this to spiral out of control. Our children and young people deserve better!

There are several ways in which adults, parents and teachers can help in trying to prevent cyberbullying. The focal way in which this can be done is to educate students, to have talks and presentations in schools so everyone is aware of internet etiquette and the way in which it is appropriate and inappropriate to behave online. Many children and young people who are the perpetrators may not be aware of how damaging and distressing this act of victimization can be. Increasing awareness of cyberbullying within schools will help to diminish peer victimization somewhat and also make everyone aware of the distressing consequences for the victims and that it will not be tolerated without severe consequences to the perpetrators. Schools can also help by ensuring parents are provided with information and support, ensuring there is always staff available to deal with such important issues and to speak with concerned parents or answer their questions. Morgan (2013) believes; “It is important for teachers to respond quickly when cyberbullying occurs, even if it is a minor case; an environment fostering safety is essential. The victim needs to feel safe, and the bully needs to know that consequences will result from his/her actions. Teachers need to have a plan to confront and deal with minor incidents before they escalate into more serious forms of bullying”. Communication is the key for children to put a stop to cyberbullying and creating a safe environment, so they feel safe and able in telling someone. Knowing it is not their fault and they will not be accused or blamed if they find the courage to talk about it. Ensuring online activity is monitored for children and young people by an appropriate adult is another key way in trying to reduce cyberbullying.



Online grooming and exposure to unsuitable content.

As wonderful a tool as the internet and digital technology can be at being able to provide children and young people with access to knowledge, it can also be extremely dangerous and give them access to content which is unsuitable for their age and or upsetting or alarming by viewing. Many internet providers and security packages allow the customer to be able to have parent settings where you can choose which sites you would like blocked and providers such as EE require customers to ring and remove the X-rated block [which is put on automatically] if you wish to view anything like pornography. However, these security methods are not always 100% effective and there are people out there such as black hat hackers who purposefully go about trying to hack through security methods and intentionally put things online such as pop ups which can happen during for example a simple kids YouTube cartoon or online free game. Regardless of whether it's an unequivocal pop up advertisement on a free diversion, recordings displaying youngsters' animation characters in grown-up circumstances, or a gathering advancing self-hurt, an innocent search can open children and young people up to content that can make them feel troubled, upset and confounded. A survey that was carried out by a consumer security company in the UK with 10,000 consumers showed that;

“92% of respondents who are parents said blocking children’s access to inappropriate content was their overriding priority. A further 62% said monitoring children’s activity online was their main reason for using parental control software, while 49% said setting limits around internet usage was their prime concern” (Roger, 2017).

It is refreshing to see such large numbers of parents taking internet safety for their children and young people seriously and are aware of the dangers. However, we should not get complacent in the knowledge that most parents are taking it seriously and aware of all of the dangers, this needs to be ALL parents. Online grooming is another serious issue which is increasing in numbers all the time in today's society and with the technological advances. This notion is echoed from the NSPCC in a news article (2015) titled 'Online grooming cases increase by almost 50%', the article says; “We're warning parents to be aware of internet safety when buying Christmas gifts after our ChildLine service revealed a huge rise in contacts from children worried about online grooming”. The NSPCC defines grooming as; “Grooming is when someone builds an emotional connection with a child to gain their trust for the purposes of sexual abuse, sexual exploitation or trafficking. Children and young people can be groomed online or face-to-face, by a stranger or by someone they know - for example a family member, friend or professional” (NSPCC, 2019). Many children and young people who are groomed are not aware that it is happening to them or don't even realise that what is happening is actually grooming and illegal. Some that do realise that something is not right feel too ashamed, pressured or scared into keeping it a secret. Below are a few signs the NSPCC say could indicate grooming.

Signs of grooming

The signs of grooming aren't always obvious and groomers will often go to great lengths not to be identified.

If a child is being groomed they may:

- be very secretive, including about what they are doing online
- have older boyfriends or girlfriends
- go to unusual places to meet friends
- have new things such as clothes or mobile phones that they can't or won't explain
- have access to drugs and alcohol.

In older children, signs of grooming can easily be mistaken for 'normal' teenage behaviour, but you may notice unexplained changes in behaviour or personality, or inappropriate sexual behaviour for their age.

(NSPCC, 2019)

Communication.

"It's never been easier to communicate. Technological advances over the last quarter-century mean we can now seek out like-minded people around the world through websites and blogs, register our opinions and order goods via interactive TV, commune across vast distance via email, social networks or videophone sites, chat with family or friends where ever we happen to be by means of a smartphone" (Palmer, 2015). This statement from Sue Palmer from her 'Toxic Childhood' book couldn't be all the more valid for society today and very much so for our children and young people. However, the more these technological advances have allowed us to get closer to those far away, it is also inhibiting us from communicating with our immediate friends and family at home. These technological advances are causing children and young people to become addicted to their handheld devices and connected with their cyber world but becoming even more disconnected from the real world.



"Ironically, the more technology has allowed us to communicate with people at a distance, the less we seem to converse with our nearest and dearest at home. As well as worrying about children's lack of sleep, the teachers I meet are particularly concerned about two other factors: lack of talk at home, and too much technology".
(Palmer, 2015)

As with all of the disadvantages I have mentioned above, it is imperative that the issues can be alleviated as much as possible by communication. Talking to friends, family, teachers, ensuring someone knows what you are doing online and that it is safe. The disadvantages I have mentioned are also all intertwined in a way as they don't often occur singly although possible. If for example a child or young person is being cyberbullied, this in turn could lead them to becoming increasingly lonely and isolated, which in succession could also equate to them having anxiety and possibly poor sleep patterns. At the same time if a child is feeling anxious due to being over tired and poor friendships socially it could mean they turn to the cyber world to get the social interaction they are craving. Children who are anxious or lack social skills in person could be at a greater risk of achieving the wrong kind of attention such as online grooming. "Victims are commonly teenagers in the care system, with backgrounds of abuse and neglect, learning disabilities or with mental health problems" (Children's Society, 2015).

The Digital Divide.

With the ever changing and progressing advances in technology today it is causing somewhat of a digital divide in society. Some of the older generation who can't or won't become technologically savvy and others who are living in poverty and possibly cannot afford or have access to all the latest gadgets are at risk of being left behind. This is causing a digital divide between them and the people who can afford all the newest gadgets and are engaging with the way in which technology is advancing. Serafino (2019) from the Office of National Statistics reaffirms this in his article; "This is leading to a digital divide between those who have access to information and communications technology and those who do not, giving rise to inequalities in access to opportunities, knowledge, services and goods".

Conclusion.

Is technology a contributing factor to a more toxic childhood for our children and young people of today? Yes, there are many disadvantages and negative impacts technology has on children and young people; however, we need to also take into account the positive effects these advances are also having. It is important for adults, parents, teachers and all child practitioners to be aware of these factors and also monitor what children and young people are doing online and also the amount of time they spend using screens and technology.

Cyber-utopia vs cyber-dystopia are two sides of the same coin. As with most things, there are positive and negatives depending on which way you want to look at it. Cyber-utopians believe that the technological advancements in today's society are having a positive effect, whereas cyber-dystopians believe the opposite. As mentioned throughout this practice log there is much evidence and research to support both sides of the argument. "Patrick Alexander argues that the current debate over the "toxicity" of childhood in contemporary Britain needs to be recontextualised if it is to provide helpful, positive discussion about the nature of childhood and education in the twenty-first century" (Alexander, 2007). He deems that toxicity suggests that we are managing an ailment that should be relieved and how apparently new technology is poisoning our children and young people and we need to look to cure these tribulations. However, toxicity does not take into account how complex childhood can be. Yes, some of the ways in which technological advancements are being used by today's children and young people are causing serious concerns but it is not the technology itself more that it is being misused. It is this misuse that is causing such toxicity within childhood and we need to take a step back in educating children and young people the correct ways in which technology can and should be used but also highlight the dangers and how to limit screen time, so it doesn't take over their lives.

Everywhere we go we see technology taking over more and more humans jobs, for example: self service tills in supermarkets or airports and automated telephone lines or an online account to do things like make payments or change details. While a machine can play out a given undertaking, regularly more proficiently than we can, what it needs is the creativity in the action, that remarkably human capacity to take into account the necessities of the person. Children and young people thrive from having human contact and social interaction and no amount of technological advancements can replace this. "Over the past three decades, worries about children's well-being have been amplified to an excruciating pitch.....childhood has become the crucible into which is ground each and every adult anxiety - about sex, consumerism, technology, safety, achievement, respect, the proper shape of life. This is a time of child-panic" (Brooks, 2006, p.16). Adults will always have worries and concerns about children and although the most prevalent worry at any given time may change over the years there will always be an "issue" at the forefront of the headlines. As Brooks (2006, p.17) says "All of these fears are real, but not all of them reflect reality".

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