

CHAPTER THIRTY-EIGHT

Social Networking Sites and Children's Social Development

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When we start to interact with others, we develop social skills that enable us to communicate with people in various roles and capacities, and process and understand their actions and reactions. Social skills are critical as they aid the development of social relations, such as friendships. They are also critical as our ability to interact with others influences our self-esteem, how we use our language, and how we resolve conflicts. Research across diverse topics, including research on online bullying, has showed psychosocial welfare and feelings of self-worth/self-esteem, are linked with the quality of peer-relationships.

Today, young children's ability to interact with others includes a digital component. Technological development, in particular in the past two decades, has provided affordable opportunities for direct interaction and socialization with others, primarily via screens. This also applies to young children. Some of these opportunities come in the form of what we generically call "social media." Social media refers to a variety of digital platforms that facilitate user interaction and the sharing and engagement with content.

While social media in the public and regulatory discourse often is considered in relation to tweens and teens, for children the social media dimension might be experienced from infant and toddler stage – being positioned in front of the camera, or having their pictures published by parents so that relatives located elsewhere can interact with them, blurring the physical and social distance. Affordances, that ease, enhance, and enable social interaction and communication between individuals of all ages and (potentially) across cultures, countries, and communities are at the core of social media.

In this chapter, drawing on an interdisciplinary body of research that encompasses communication and digital policy studies, psychology, sociology, anthropology, and medical science, among others, we will outline the available evidence about how children engage with social media: Risks, possible harms but also the benefits. It is also imperative to observe that not all children's interaction with social media is voluntary. Consequently, we will briefly discuss the cases of so-called "sharenting" where parents post on social media about their children, very often without their children's approval (Blum-Ross & Livingstone, 2017). Adopting an approach that can best be characterized as wary of technological determinism, we will examine available evidence about how such use affects the socialization process; and whether or not, and under what circumstances, social media engagement enhances, extends, or replaces face-to-face friendships and other social relations. We will discuss some of the key trends regarding children's social media use based on one of the largest studies in Europe available about children's use of digital media – the most recent EU Kids Online survey in 19 countries with children aged 9–17 years.

Most social media platforms cater to children age 13 and above, and a significant body of research on children's social media use concerns those who are at least 9 years old. While children under the age of 9 can and do use digital media, through their own devices, by borrowing from parents or siblings, or in schools, the use of social media often requires rather advanced digital and cognitive skills. As most social media require users to provide at least some personal information in the process of building one's online identity or profile, this also causes privacy concerns and legal and technical barriers for younger children. In addition, research on younger children's engagement with social media poses methodological and ethical challenges, as one is asking children about what is potentially deviant behavior. It is also challenging for researchers to identify younger children on social media, as young children in many cases must represent themselves as being older in order to gain access to social media in the first place. While there are social media sites that focus on younger children specifically, such as Facebook Messenger Kids, Club Penguin, and Popjam, there is a limited amount of research focusing on their use of these and the associated implications (Finnegan, 2020; Kargin, 2018; The Internet Commission, 2021). This is why this chapter predominantly refers to research on social media use of children who are 9 years of age and above.

Social Media Platforms and Technological Affordances

What is social media? In public discourse, perhaps especially in relation to children and online risks, the term social media is often used loosely – it becomes a generic category for all things internet, especially the challenging and potential risky parts and practices. Much like, and often interlinked with, concerns around the problematic concept of "screen time," and "smartphone addiction" (Lee et al., 2020; Twenge, 2019), the issue of social media use among children and youth and the associated impact thereof is controversial. And notably both public and scientific discourses on the issue have been fraught with anxieties about the possible negative effects and consequences of such use.

However, social media refers to a specific type of digital communication that can be found in many services, where users can create, share, and interact with (often personal) content – live or delayed – of various sorts. Thus, it is important to acknowledge the mediated *social* and communicative dimension of social networking sites (SNS), making it particularly relevant when considering the role of media in children's social development.

Social media sites, platforms, or companies tend to also exist in the forms of applications or “apps” which can be downloaded from App Store and Google Play. Less than two decades old, these platforms have become extremely popular among youth (boyd, 2014). They ushered in a new business model where users divulge vast amounts of information by partaking in the so-called sharing culture (Van Dijck, 2013; Zuboff, 2019). And, as the social media landscape is continuously and rapidly changing, the platforms that were popular among youth only a few years ago may no longer even exist (Milosevic, 2018).

Socialization online takes place through sharing, which also enables the accumulation of social capital in the form of followers, friends, or likes, depending on the characteristics and technological affordances of every platform. Technological affordances can be defined as “actions or uses a technology makes easier” (Earl & Kimport, 2011, p. 32; see also Rosenbaum, 2019). Social media platforms significantly vary in their characteristics and affordances – while some favor symmetrical relationships (one needs to accept a friendship request on Facebook in order to be connected, albeit following is possible there too); others are by default asymmetrical (e.g., you can “follow” someone on Twitter without having been accepted first, and they do not need to necessarily follow you back). Time and format also vary greatly. Some platforms, like Snapchat, allow for the content to “disappear” after a certain amount of time; and others, like the app “Tik Tok” allow for the creation of lip-syncing videos to popular tunes, among many other features. Most also have a limit to the amount of and the types of information you can publish in one posting.

There are many definitions of social media and one that captures a multitude of their facets proposes that social media platforms “enable the intermediation of user-generated content” allowing for “interactivity among users,” “direct engagement with content,” and “the ability of an individual to articulate connections with other users” (DeNardis & Hackl, 2015, p. 762). While direct or instant messenger companies such as Facebook-owned WhatsApp, Facebook messenger, or Viber would appear to meet the criteria in this definition, not everyone would consider them to be social media platforms. Direct messengers tend to allow for the sharing of content among a limited number of users (such as one's contacts) and they are considered to be more “private” rather than being *primarily* geared towards “broadcasting” content to many users (Milosevic, 2018).

Nonetheless, social media platforms that are not primarily messengers, such as Facebook, Instagram, or Twitter, also provide for direct messaging capacity and more private communication in the form of smaller groups, which allows for stricter privacy settings. This point can present a challenge for regulating online harms because various types of risks such as cyberbullying, sexting, or grooming can nonetheless take place on messenger platforms. Designing regulation is not easy for messaging services whose technological affordances pertain to social media but also exhibit distinct properties, as there is a need to strike a balance between protection from these risks on the one hand and privacy on the other (Wright

& Javid, 2019). Privacy is an important aspect of direct/instant messaging services between individuals. Ensuring privacy, for instance by using encryption, can be a way of safeguarding freedom of expression. At the same time encryption, which tends to be a feature of direct messaging services, can interfere in the regulation of online harms and the protection of minors, and this has been a subject of significant debate (Endeley, 2018; Staksrud et al., 2020). This is why it is very important to understand social media platforms as a complex space with diverse actors that allow for a range of social interactions, and conclusions about sweeping monolithic effects should be regarded with caution. For example, while Wikipedia may not normally be conceptualized as social media, it could fall under the definition above and it is sometimes considered as such following its properties, which enable collaborative content creation and learning; the same is the case with online games such as Minecraft, which enable children to explore relationships with peers by engaging in creativity and joint building activities (Swist et al., 2015).

The rapid development and adaptation of social media has been especially the case for children and youth. An estimated one in three internet users globally are under the age of 18 (Livingstone et al., 2016). In 2011, 7 years after the first known use of the term “social media,” the EU Kids online survey from 25 European countries found how 59% of European 9–16-year-olds who use the internet had their own SNS profile (Livingstone, Ólafsson et al., 2011). Similarly, 80% of American 12–17-year-olds had profiles (Lenhart et al., 2011). According to more recent data from 19 European countries, 54% of 9–16-year-old internet-using children visited SNS on a daily basis or more often (Smahel et al., 2020). Data from UNICEF shows that in developing countries outside Europe as well, many children are participating in three or more different social activities online at least weekly; among 15–17-year-olds this is as many as 92% in Brazil and 82% in South Africa (Livingstone et al., 2019; UNICEF, 2020). Many of these activities include SNS.

Social Media Platforms and Safety: Risks, Harms and Concerns – What is at Stake?

The concern about the negative impact of social media use on children’s social development and overall wellbeing can be regarded in the context of a wider debate about the so-called “smartphone addiction” (Lee et al., 2020; Twenge, 2019) and screen-time concerns, as well as fears of unwelcome communication, such as cyberbullying and “stranger-danger” linked to potential sexual abuse. Detangling the core of the concern and the behavior is challenging and raises some often seemingly contradictory perspectives for research. Are children addicted to the screen or to the (social) interaction with their friends? Is extensive time used on social media a sign of behavioral problems and loneliness, or of sociability? Is it about the media technology or is it about the social aspect? Is it the case that children who are lonely and are experiencing issues in connecting with friends offline, seek online friendships to compensate for the paucity of offline contacts – the “social compensation hypothesis”; or do children with significant social capital offline,

leverage social media to accrue more of it online as well, consistent with the “rich get richer hypothesis” (Desjarlais & Willoughby, 2010)?

In a similar vein, some research finds that online and social media communication offers a limited range of cues, which can have a negative impact on young people's social development and even declining empathy levels (Turkle, 2017). On the other hand, the “hyperpersonal communication model,” which pertains to the subfield of computer-mediated communication (CMC), posits that such interaction allows for a distinct type of communication (Walther, 1996). It allows individuals to leverage limited social cues to their advantage by editing out such information that they do not like about themselves, thus having greater control over the impact they have on the message receiver (Henderson & Gilding, 2004; Scott & Fullwood, 2020).

To try to understand and measure the social and psychological negative symptoms associated with social media use, researchers have designed various scales, such as the “social media addiction” and “social media disorder” scales (Blackwell et al., 2017; Hawi et al., 2019; Van den Eijnden et al., 2016). Other prominent concerns are related to the experience of interpersonal risks such as cyberbullying, “sexting” (sharing of sexually charged texts, images, or videos) or various contacts with strangers in the form of grooming (adult solicitation of children), and various privacy violations, which can all have a potential negative impact on children's social development. While there is a relative lack of longitudinal research that would allow for conclusions about the causal direction, these concerns have resulted in various public calls for banning access to social media and are subsequently related to the policies of age-gating to protect younger children from both content and the conduct of other users.

The complexities of potential perceived risks associated with communicating with others can make it challenging to detangle and differentiate the types of risks involved and the potential for different online experiences resulting in actual harm and/or development of resilience and skills. To try to make it clearer, and when discussing online risks, the EU Kids Online research framework identifies three types of risks: *content*, *contact*, and *conduct* related risks, and this typology applies to online opportunities as well (Livingstone et al., 2018).

With respect to *content*, the child acts as a recipient, for example by encountering aggressive, sexual, pornographic, or hateful content towards certain groups, spam, or advertising, among other types of risks; on the other hand content-related opportunities include educational content or access to information, among others.

Regarding *contact*-related risks, the child acts as a participant, for example by being cyberbullied or by being tracked by advertisers or contacted by strangers for grooming purposes; on the opportunities side this includes socializing and sharing experiences with others who share similar interests etc.

Conduct risks include bullying others online or uploading pornographic content, among other things; while on the opportunities side, this could entail civic engagement or collaborative learning, among other things.

For a detailed categorization see Table 38.1, online risks and opportunities categorization, taken from Staksrud et al. (2009). While these apply broadly to online environments, arguably they can all be experienced on various types of social media and digital/instant messaging platforms.

Table 38.1 Classification of online risks and opportunities.

		<i>Content: Child as recipient</i>	<i>Contact: Child as participant</i>	<i>Conduct: Child as actor</i>
Opportunities	Education learning and digital literacy	Educational resources	Contact with others who share one's interests	Self-initiated or collaborative learning
	Participation and civic engagement	Global information	Exchange among interest groups	Concrete forms of civic engagement
	Creativity and self-expression	Diversity of resources	Being invited/ inspired to create or participate	User-generated content creation
	Identity and social connection	Advice (personal/ health/sexual etc.)	Social networking, shared experiences with others	Expression of identity
Risks	Commercial	Advertising, spam, sponsorship	Tracking/harvesting personal info	Gambling, illegal downloads, hacking
	Aggressive	Violent/gruesome/ hateful content	Being bullied, harassed or stalked	Bullying or harassing another
	Sexual	Pornographic/harmful sexual content	Meeting strangers, being groomed	Creating/ uploading porn material
	Values	Racist, biased info/ advice (e.g., drugs)	Self-harm, unwelcome persuasion	Providing advice e.g., suicide/ pro-anorexia

The Policy of Age-Gating Social Media Access: Privacy and Safety

Throughout history, the fear of media access, content, and interactions having a potential negative effect on children and youth in general, and younger children in particular, has resulted in legal access regulations pending on age. Using age as a regulatory and organizing instrument to signal maturity, cognitive and developmental skills to parents and caretakers, is an effective and desirable way for adults to maneuver new technology they do not recognize from their own childhood. However, such systems do not typically allow for a sufficient level of nuance in terms of individual differences. All children in one age cohort are considered the same. But, when it comes to social media, where the relation to and communication with others is a central element, and where social media can be a gateway to a wide range of content, services, and practices – this becomes more complicated. While many parents will recognize and consider 13 years as the publicly cited right age to allow for social media engagement, the age of 13 is *not* based on children's development but has been somewhat arbitrarily decided during law-making processes as the age of maturity, implying a radical transformation which is not necessarily based on research.

Generally speaking, most social media companies tend not to allow access to their platforms to children under the age of 13. While there appears to be a level of confusion among parents and caregivers about why this age limit is in place, the rationale is privacy protection rather than safety concerns. Many of the largest social media companies are American in origin, and the choice of age has been spurred by a United States law titled Children's Online Privacy Protection Act or COPPA of 1998, which has been revised on several occasions since (Montgomery, 2015a). The Act prohibits online companies, among them social media platforms, from collecting data from children under the age of 13 years without parental consent. As it would be cumbersome for companies to collect consent from parents for children under the specified age, many social media companies ban access to younger children, a provision that platforms stipulate in their corporate documents which govern the rules of each platform, also known as "Terms of Service." These can clearly be violated as many platforms simply ask children to state their age without any form of verification. Research in the United States has also found that parents and caregivers actively assist children in circumventing platform rules (Hargittai et al., 2011).

Research supports the idea that different children mature in diverse ways and such a one size fits all cut-off reveals challenges around designing policies based on age gating (Livingstone et al., 2013; Livingstone & Ólafsson, 2018; Staksrud, 2016). A more recent piece of legislation in the European Union, Article 8 of the General Data Protection Regulation (GDPR), which came into effect in 2018, has since incorporated this provision, allowing for member states to decide the age of consent for children, which can be any age between 13 and 16 (Macenaite, 2017; Van der Hof & Lievens, 2018), but importantly, not below 13. At the same time research shows that many children under the age of 13 do access and have profiles on social media, often with the explicit blessings and help from their parents. In the 25 country EU Kids Online study from 2011, it was found how 38% of 9–12-year-olds use SNSs, many on sites that specifically ban their age group (Livingstone et al., 2013).

Importantly, there are also social media platforms designed specifically for younger children, below the age of 13, such as Facebook's Messenger Kids or YouTube Kids app, among others, which clearly had to collect parental consents for their children's use of the platforms. These allow content that is geared towards younger children and that has been pre-cleared (even though problems with age-inappropriate content have arisen, see e.g., Tahir et al., 2019); they also allow for a greater degree of monitoring on behalf of the parent. Nonetheless, the 13 years of age limit, which is centered on data privacy, has fostered an impression that such age-gating is driven by safety concerns. The resulting consequence, which can have implications for children's social development, is that platforms negate the existence of underage children in order to remain compliant with the regulation, and therefore they do not design their tools with underage children in mind, nor are they forced to innovate for younger children (boyd 2015; Montgomery, 2015b; Staksrud, 2016).

As a result, many underage users are forced to lie about their age and in company of older children, emulate their behavior in order to keep using the platform. They are also potentially exposed to risks that they may not be mature enough to cope with, and for which they cannot ask for help, as "they were not supposed to be there" in the first place. In addition, it raises interesting questions regarding children's rights in terms of media provisions, freedom of information, and freedom of expression. As social media becomes a central democratic mediator for information, social engagements, and news, what are the consequences of excluding children from this venue based on age only? Against this background it becomes critical to understand more about children's direct and indirect experience with social media, and the potential benefits and negative consequences of these experiences.

Theoretical Framework for Understanding the Role of Social Media in Children's Social Development

Following this context about the nature of social media and their role in children's lives, and before further examination of the available evidence on the role of social media in children's social development, we need to specify our theoretical framework. Drawing from the new sociology of childhood (James & Prout, 2015; Prout, 2011), we see children's social media use not as inherently harmful or beneficial, but with the outcome depending on the interplay of a variety of factors at the individual, family, social, cultural, and country levels which have an effect on children's internet and social media use (Livingstone et al., 2013). This approach has been outlined in the analytic framework (see Figure 38.1) of the EU Kids Online research network (Livingstone et al., 2018), which broadly draws from Bronfenbrenner's ecological model of human development (1979).

Examining Evidence Behind SNS Use in Children and Negative Outcomes

One of the key questions then is, does children's SNS use increase their risk of harm? According to an earlier EU Kids Online study (Livingstone, Haddon et al., 2011), which relied on nationally representative samples of 9–16-year-old internet-using children at the

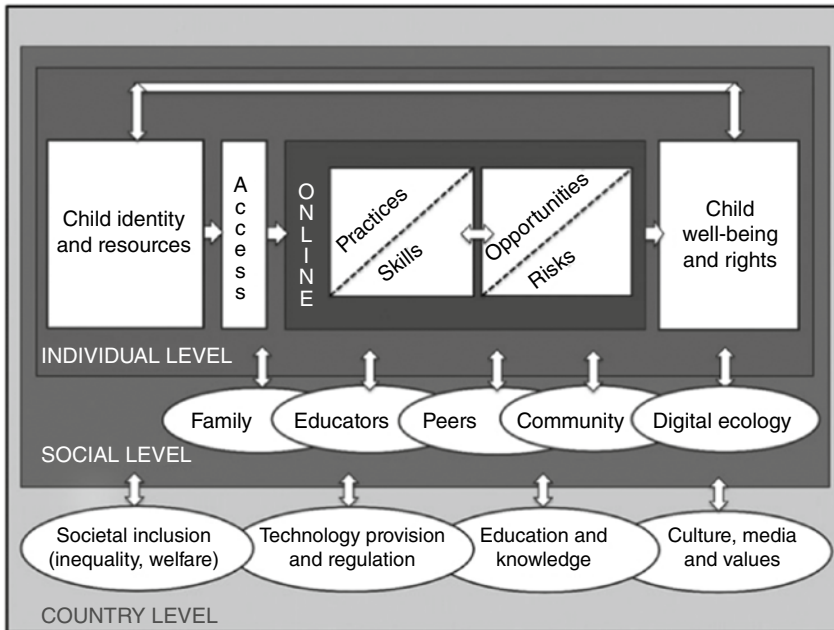


Figure 38.1 EU Kids Online theoretical model (from Livingstone et al., 2018).

time (2010), the answer is not necessarily so (Staksrud et al., 2013). It was the case that children who used SNS were more likely to experience more risks than children who did not use them; children with stronger digital skills experienced more risks; and so did children who practiced riskier SNS use practices, such as having a public profile, who gave out identifying information, and had more contacts. Nonetheless, the research found that SNS use “is not associated especially with an increase in harm, as reported by the child” (Staksrud et al., 2013, p. 47). This underscores the essential difference between *risk* and *harm* as outlined in the theoretical model – more risk does not necessarily result in greater harm – but the outcome depends on a variety of factors.

According to the findings from the 2018 EU Kids Online survey (Smahel et al., 2020), most children in Europe feel safe online: 60% of 9–11-year-olds, 68% of 12–14-year-olds and 71% of 15–16-year-olds report that they “always” or “often” feel safe online. Looking at earlier findings across European countries, while younger children (9–11 years old) tended to be more worried about content risks, older children (12–14, 15–16 years old) tended to be generally more worried about conduct and contact risks (Livingstone et al., 2014). Honing in on the actual prevalence rates when it comes to exposure and the associated harm, for example to *content* risks such as pornographic content, almost a half of 9–11-year-olds (49%) who saw images of a sexual nature online said they made them feel a little, fairly, or very upset; this compared to less than a third of 12–14-year-olds and a quarter of 15–16-year-olds. For 12–16-year-old children in Europe, the later EU Kids Online study shows that frequent exposure (monthly or more often) to other types of harmful content remains under 20%; this includes content showing ways of physically harming or hurting oneself; hateful content (hate speech), pro-ana and pro-mia content, which refers to content related to eating disorders anorexia and bulimia, and violent or

gory images (Smahel et al., 2020). Much of this content is not sanctioned on social media platforms, and social media rely on human and automatized moderation to prevent children and other users from engaging with such content; nonetheless, much of it remains on platforms as these are often unable to effectively moderate it; and young users often find creative ways to bypass these restrictions (see Chancellor et al., 2016 for lexical variations in pro-eating disorder communities on social media).

As an example of the actual prevalence of risk exposure on the *contact* side, 20% of 9–11-year-olds had been treated in a hurtful or nasty way online or offline at least a few times in the past year, and 82% of them said they were upset about it; this compares with 78% of 12–14- and 15–16-year-olds. To provide an example of *conduct* risks, only 5% of children age 9–16 engaged in online aggression (as perpetrators) at least a few times in the previous year; whereas 3% of 9–16-year-old internet-using children had done so at least every month in the past year. Perpetration increases with age: 10% of 9–11-year-olds report online or offline perpetration in the past year; compared to 16% of 12–14-year-olds, and 20% of 15–16-year-olds.

Depression, anxiety, and the “fear of missing out” (FOMO) have all been associated with children’s social media use. A systematic review of studies examining the association between the use of SNS in children aged 5–18 years and development of depressive and anxiety symptoms, spanning 2005 to 2019, found that more time on SNS and “higher levels of investment” in SNS use were “significantly associated with higher levels of anxiety symptoms” (Piteo & Ward, 2020, p. 1). Likewise, increased time on SNS and problematic or addictive use, were found to be significantly associated with higher levels of depressive symptoms. In their systematic review based on the 2014 United States National Institute of Health Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies (NHLBI, 2014), Piteo and Ward concluded that for both anxiety and depression, the effect sizes were small and derived from poor quality studies, and that findings need to be interpreted with caution. Consequently, there is a need to further explore confounding factors such as perceived social support, fear of missing out (FOMO), and social comparison and how this is related to depression and anxiety.

The relationship between social media use and children’s psychological well-being is subject to a continuous heated debate on whether and to what extent more broadly digital media use or time spent on/with screens detracts from children’s mental health (Orben & Przybylski, 2019; Twenge et al., 2020; Chapter 37, this volume). Contrary to the displacement hypothesis, which suggests that children’s time spent with digital, including social media, negatively affects their well-being because it detracts from important offline activities such as sleep or face-to-face socialization, a Goldilocks hypothesis has been identified (Przybylski & Weinstein, 2017). This hypothesis, which stems from research that found that little or no digital media use has the same negative effect on well-being as intense use, suggests that moderate use might positively contribute to well-being, allowing for a balance among online and offline activities. Analyzing the same datasets, scholars have come to different sets of conclusions about social media use and children’s mental health. While some argue that the effects are minimal to call for a change in policy, others have found that twice as many heavy social media users have experienced “clinically relevant symptoms of depression” and that negative effects on mental health are particularly visible with girls in different countries (Orben & Przybylski, 2019; Twenge et al., 2020).

Studies that explicitly compared face-to-face and online communication have come to contradictory conclusions. An earlier study found that for pre- and early-adolescent children online communication with friends contributed to strengthening offline relationships (Valkenburg & Peter, 2007). Others however found that while face-to-face communication was consistently found to contribute to positive socioemotional outcomes, this was not the case for online communication, including video-related activities and media multitasking (Pea et al., 2012).

Looking more specifically into social comparison, negative feedback on social media can have a negative impact on adolescents' self-concept and their self-esteem at least as much as offline negative feedback. A study that looked into the reasons behind receiving negative peer feedback on social media found that online social exploration and risky behavior, such as posting provocative or sexy photos or images in which they look good on social media, increased the risk of such negative feedback (Koutamanis et al., 2015).

Parental Mediation of Children's Social Media Use

Parental mediation of children's internet use refers to a range of strategies that parents or caregivers engage in to regulate children's use of digital devices and content (Chapter 37, this volume). Drawing from research about parental mediation of TV use, studies have generally identified three broad types of parental mediation regarding the use of the internet: active mediation of internet use (which includes providing advice, actively discussing or sharing an online activity with the child); active mediation of internet safety; restrictive mediation (such as placing time limits on use or controlling access to certain sites or engagement in activities or limiting a child's use to certain locations in or outside of home); technical controls (such as parental controls and filters); and monitoring the child's activity such as checking their visits to platforms after use, for instance (Livingstone & Helsper, 2008). A study on parents of 6–14-year-olds, found that enabling parental mediation (which included active mediation of use and safety, technical controls, and monitoring) was related to more online opportunities (benefits of digital media use such as learning, socialization, and digital skills) but also more risks; whereas restrictive mediation was related to fewer risks but also fewer opportunities (Livingstone et al., 2017). Previous research has found that parents with stronger digital skills and social media literacy, tend to engage more in active mediation of their child's social media use, rather than restrictive strategies (Daneels & Vanwynsberghe, 2017).

Children under the Age of Nine and Digital Media Use

Most children in economically developed countries, where much of the research on young children's digital media use has been undertaken, exhibit some level of access to digital media much before 9 years of age. For example in the United States, data from 2017 show that 95% of under 8-year-olds had access to a smartphone in their household (a 41%

increase from 2011); almost a half of 2–4-year-olds (43%) owned a tablet and spent almost one hour a day (58 mins) on mobile devices (Superti Pantoja et al., 2020). According to a recent study in 21 European countries, children's first contact with digital media begins very early, below the age of 2, and typically via parents' devices (Chaudron et al., 2018). Children learn to interact via observation from their household members and trial and error and use digital media for entertainment, communication, information, and even content creation. Only a minority of children, and typically around the age of 6, were found to be social networkers, mostly when invited by their parents and while using a family or parental account rather than their own. Among parents of younger children (under the age of 8), those with a stronger digital media competence engaged in more active parental mediation such as enabling mediation (for example conversations and advice about digital media use and co-use), monitoring, and technical mediation (Izrael et al., 2018).

Surveillance Capitalism, Algorithmic Curation, Filter Bubbles, and Sharenting

Many of the risks and opportunities outlined in Table 38.1 take place at the surface level of the social media infrastructure – at the level of content. Commercial risks, however, in the form of tracking, advertising, and data harvesting, which rest at the heart of social media platforms' business models, are largely hidden from users' view as they take place at the level of platform infrastructure (DeNardis, 2014). Therefore, these risks may not be obvious to children at all, and it takes digital literacy and more broadly media literacy training to make them cognizant of these risks (Kotilainen et al., 2020). The issue at stake here is that data traces that children's social interactions leave behind are available for mining on behalf of social-media platforms and this mining results in algorithm optimization which then informs and shapes the user experience that children on social media platforms will have (Montgomery 2015b).

At the very basic level, being served the content tailored based on one's social circles and previous behaviors and data traces left on the social media platform, has been shown to contribute to a phenomenon known as “echo-chamber effect” or “filter bubble” (Nguyen & Vu, 2019). These terms refers to the ability afforded by digital media to isolate oneself by following only the types of news that are in line with one's views and attitudes; and to engage only with like-minded people, while distancing oneself from everything and everyone else. Such preference-based isolation was difficult in the analogue era where users' media choice was a lot more limited, but in the digital realm preference-based content and communication is actively aided by algorithms designed to optimize user searches and preferences. Being left in the company of only like-minded individuals with similar interests on SNS could have an effect on children's identity formation and social development.

While social media companies tend to say they do not sell children's data to third parties, the prospect of this data being sold to data brokers and recorded in profiles in the absence of

adequate regulation or its enforcement, has brought concerns about how children's early involvement with social and digital media can more broadly can shape their educational and career opportunities in the future (Montgomery, 2015a; Van der Hof & Lievens, 2018). For example, if university admissions officers and prospective employers had access to data on children's behavioral habits, searches, purchases, gleaned from their social media use since they were very young, and if they could then make decisions about university attendance or employability – such a scenario raises privacy concerns as regards to children's social media use and the value extracted as the by-product of their social development. The attention-mining, click-driven digital infrastructure has further facilitated the recent faster spread of misinformation also characterized as “fake news,” which can have implications for children's civic development and impact on their ability to critically evaluate information (Alvermann, 2017).

This digital ecology has been variously characterized, quite often as “surveillance capitalism” (Barassi, 2020; Zuboff, 2019) and it shapes children's social development at the level of society and culture specified in Figure 38.1. Consider that digital tracking can begin from a child's birth: parents are increasingly encouraged to use wearable devices such as various forms of health tracking for their babies, a form of commercial data collection from families that is discursively constructed as responsible parenting (Holloway et al., 2020). Such tracking typically operates via apps with social networking properties, perhaps the most famous example being Fitbit. Furthermore, social media is no longer only something that children willingly subscribe to, but something they are being brought into since birth by their own parents.

The pervasiveness of sharing culture which centers on performativity and thereby drives data collection for commercial purposes, has prompted many parents to engage in “sharenting” – the posting of photos, videos, and other type of content about their children on social media (Blum-Ross & Livingstone, 2017). According to EU Kids Online research, surveying children in 19 European countries, on average one-fifth of 12–16-year-olds said their parents or caregivers posted something about them online without first asking them for permission; 14% have asked their parent or caregiver to remove things they posted online about them; and 9% have been upset about something that their parent or caregiver had posted about them (Smahel et al., 2020). Thus, when considering the benefits and risks related to (young) children's engagement with social media, it is important to recognize that for young children, most of these risks are generated by their parents, family members, and other caretakers, rather than the child itself.

Benefits of Social Media Use for Children and Adolescents

Social media is a fertile ground for social-development processes (boyd 2008, 2014). SNS provide a venue for social comparison, self-disclosure, and impression management. Among many benefits, social media provides an avenue for identity and peer relationships development as well as complementing a desire for intimacy and a better insight into their friends' feelings, allowing for a greater sense of connection, peer support and approval, but also greater autonomy (Uhls et al., 2017).

Swist and colleagues (2015) summarize a number of benefits that social media use can have for children. Citing examples of SNS such as Minecraft, Gaia Interactive, and Habbo Hotel, among others, they describe the emotional connection that children can establish with online communities on social media. By allowing children the freedom to experiment with roleplay by taking on or building different characters through anime and avatars, children explore their identities and establish relationships with other users. Through art, creativity, and play they also get to discuss “random things,” complain about things that bother them in life, make new friends and laugh, but also discuss serious issues (Swist et al., 2015). Such sense of belonging to a community can promote psychological resilience (Collin et al., 2011), as was also the case with adolescents surviving the 2011 Utøya terror attacks in Norway (Nilsen et al., 2018).

The public discourse on social media and children and adolescents is typically related to how children spend their leisure time, rather than the use of social media and the development of skills in schools. This perhaps might explain why the focus typically tends to be skewed towards a focus on risks rather than opportunities. However, research has also shown how social media sites can promote formal and informal learning with children, fostering the interconnection between the two. The learning that takes place on SNS is “socially embedded,” and “interest-driven,” allowing young people to follow their interests with the support of friends and caring adults, and to leverage these for academic success and future career achievement (Ito et al., 2013). While the ability to capitalize on these is doubtlessly affected by digital divides and the socioeconomic context that children grow up in (Helsper, 2017), these opportunities can nonetheless positively influence children’s socialization processes.

Social media also provide avenues for civic engagement and digital citizenship (Cortesi et al., 2020; Jenkins et al., 2018; Vromen et al., 2015). While the majority of the literature on youth civic engagement tends to focus on children over the age of 15, there is an emerging body of evidence about the ways in which children as young as 8 can leverage social media for civic awareness and engagement (Roque et al., 2016). Examples from Scratch, a coding platform with social-media properties, includes children showing support for victims of an earthquake; protesting against animal testing; advocating for improvements in community arrangements on the platform itself; protecting their intellectual property from unwanted remixing by other users; and participating in elections to become a community moderator. Literature also documents youth involvement in climate change activism on social media (Boulianne et al., 2020; Marris, 2019).

Concluding Remarks

In this chapter, we sought to outline some of the key implications of children’s social media use for their social development. In doing so, we have identified that the applications of social media definitions are to an extent malleable with not entirely clear-cut boundaries and categories. Some would consider various types of online games to have elements of social media as well; including collaborative educational platforms such as Wikipedia, whereas others would disagree with such broad consideration. The use of

social media starts ever earlier as the practice of sharenting and the sharing of children's information by parents and caregivers can start even before children's birth. While there are social media platforms that cater to younger children, typically social media platforms' Terms of Service stipulate a minimum of age of 13 years – and we have discussed the legislative rationale for this limit as well as safety *vs.* privacy considerations and problematic aspects of such age-gating and policy enforcement. Finally, we examined the various risks and opportunities that children can experience on social media with a view to their social development, pointing to the fact that there is a significant level of disagreement in the academic community about the interpretation of relevant data as to the extent of harm experienced on social media.

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