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An Ethical Discussion About the Responsibility for Protection of Minors in the Digital Environment: A State-of-the-art review

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Recommended Citation

Alves de Castro, C., Carthy, A., & O'Reilly, I. (2022). An Ethical Discussion About the Responsibility for Protection of Minors in the Digital Environment: A state-of-the-art review. Advances in Social Sciences Research Journal, 9(5), 343–370. DOI: 10.14738/assrj.95.12433

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Funder: Irish Research Council



Advances in Social Sciences Research Journal - Vol. 9, No. 5

Publication Date: May 25, 2022 **DOI**:10.14738/assrj.95.12433.

Castro, C. A., Carthy, A., & O'Reilly, I. (2022). An Ethical Discussion About the Responsibility for Protection of Minors in the Digital Environment: A State-of-the-art review. Advances in Social Sciences Research Journal, 9(5). 343-370.



An Ethical Discussion About the Responsibility for Protection of Minors in the Digital Environment: A State-of-the-art review

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ABSTRACT

Many ethical questions have been raised regarding the use of social media and the internet, mainly related to the protection of young people in the digital environment. In order to critically address the research question "who is responsible for ethically protecting minors in the digital environment?", this paper will review the main literature available to understand the role of parents, the government, and companies in protecting young people within the digital environment. We employed a holistic process that covers a state-of-the-art review and desk research. The article is divided into four sessions; (1) Government Policies from the European Union (EU) Perspective; (2) Parental Control; (3) An Overview of Companies and the Private and Self-Regulation Sectors; and (4) the Ethical Dilemma. Throughout, we reviewed specific topics regarding the potentially harmful content for young people within the digital environment, questioned how ethical concerns shape content and interactions online and discussed how internet parenting styles impact risks and opportunities for young people in the digital world. Finally, we analysed the research question contrasting it with the main findings in this review and offered recommendations.

Keywords: Social Media; Young People; Digital Environment; Protection; Europe.

ACKNOWLEDGEMENT

The research conducted in this paper was funded by the Irish Research Council under award number GOIPG/2021/360.

INTRODUCTION

Internet use has raised many ethical concerns and questions, mainly concerning minors' online safety and protection within the digital environment. Some of the issues that may affect this group include data protection, regulations, policies, addiction, exposure to harmful content,

unhealthy eating habits, mental health issues, increased alcohol consumption, sexual and violent content spread online, and many other issues. Harmful content in this study is considered several types of material that may offend other persons' values and feelings, content related to offences on expressing political opinions, religious beliefs or views on racial matters, violent or sexually exploitative content, cyberbullying, any type of coercion or sexual extortion etc. (Commission of the European Communities, 1996; International Save the Children Alliance, 2008; The alliance to better protect minors online, 2017). It is essential to note that the European Commission highlights that what is considered harmful depends on cultural differences, and the fundamental rights, especially the right of freedom of expression, have to be fully respected.

Numerous studies addressing many of these issues have been conducted by O'Neill (2013); Coates *et al.* (2019); Lou and HK (2019); Qutteina *et al.* (2019); Van *et al.* (2019); Hendriks *et al.* (2020); and Smahel *et al.* (2020).

Are companies such as Facebook, Tik Tok, Instagram and YouTube liable for protecting minors in the digital environment? Or are governments? Or Parents? This is the research question this review sets out to address "who is responsible for ethically protecting minors in the digital environment?".

RESEARCH QUESTION AND OBJECTIVES

In order to address the question "Who is responsible for ethically protecting minors in the digital environment?" firstly, we propose a review of the main literature available to understand the role of parents, the government, and companies in protecting minors from harmful content they may be exposed to in the digital environment. Also, it is essential to examine programmes available that aim to protect young people in the digital environment. Finally, we review specific topics that serve to sustain the critical discussion in this paper, such as harmful content, ethics, internet parenting style and risks and opportunities for minors in the digital environment.

METHODOLOGY

This review adopts a qualitative approach involving a state-of-the-art review employing the academic database cataloghe available online that was conducted according to the twelve steps recommended by Kable, Pich and Maslin-Prothero (2012). Additionally, specific keywords derived from the research question were utilised to select papers and reports, such as 'protection of young people', 'ethics', 'minors' and 'digital environment', in addition to subgroups, such as harmful content, vulnerable young people on the internet, and policies to protect young people in the digital environment.

An additional element of this qualitative study involved an evaluation and analysis of reports and an analysis of the implementation of programmes created by the European Union. Desk research was employed in order to review reports, acts, policies, legislation, measures, documents, reviews, summaries, regulations and statutes from a European perspective such as the European Audiovisual Observatory, EU Kids Online, the Council of Europe, the European Commission, and the ICT Coalition. This stage aimed to collect secondary data for this study as well as to give details about the chronological development of the topic studied and evaluate regulations and acts linked to the protection of minors in the digital environment.

In both stages, we considered the six elements of Bloom's Taxonomy (knowledge, Comprehension, Application, Analysis, Synthesis and Evaluation) to effectively develop critical thinking towards the main themes explored in this paper as well as achieve a critical analysis based on the objectives and research question (Bloom *et al.*, 1956).

Finally, Articles and reports were chosen according to the following criteria: 1. Must be peer-reviewed; 2. The number of citations; 3. Relationship of the keywords and abstract with the topic covered in this paper; 4. The reliability and validation of research methods; 5. The reliability of the publisher.

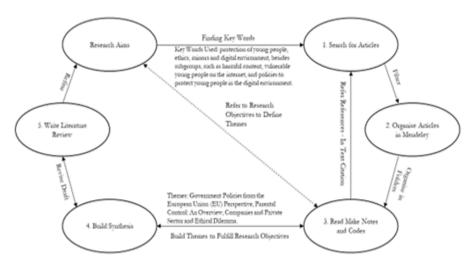


Figure 1. Review Process, elaborated by the author (2022)

A STATE-OF-THE-ART REVIEW

The review's purpose is to present, explain, and evaluate the existing literature about the topic and provide evidence, recommendations, and solutions to answer the research question. Current research in this area is compared with previous research focusing on the following concepts/issues: government policies from an EU perspective, parental controls, self-regulation (corporate and private sector), and ethical perspectives (Bryman, 2004).

Government Policies from the European Union (EU) Perspective

The protection of minors in the digital environment is a critical goal of the EU (European Union). In fact, in 1996, the European Commission published a document recognising the importance of this issue, mainly because new media platforms could contribute more visibly and at a faster rate than traditional media to make such content more accessible to minors (Commission of the European Communities, 1996). However, this document was only the starting point, since, in that same year, the European Commission published another document with the primary goal of proposing the first specific control measures to protect minors, to create a more critical approach to the use of online content, essentially based on technological standards, content filtering systems, covering parental control software, and an age-based labelling system (Commission of the European Communities, 1996).

Therefore, the European Commission laid the foundations for several programs to protect minors in the digital environment, increasing awareness of such a problem. According to the European Audiovisual Observatory IRIS plus EAO, (2012), the European Commission has significantly contributed to increasing awareness of the need to evaluate and rethink the regulatory and legal framework protecting minors in the digital environment, especially in keeping with the dynamism and changing nature of the media landscape. Hence, it was being acknowledged that the existing model for protecting minors in the audiovisual environment was transitioning to the online world/digital environment, with the internet making it quite impossible to apply the existing and more traditional protection standards.

Such acknowledgement was the foundation of the "Action plan for a safer internet", which was created in 1999 to promote a favourable environment to the development of the internet industry, more precisely by encouraging safe use of the web and by combating illegal and harmful content (Labio-Bernal, Romero-Domínguez and García-Orta, 2020).

The main pillars of the "Action plan for a safer internet" are the following; 1) the development of content classification and filtering systems; 2) safety through a European network of hotlines for reporting illegal content; 3) the development of self-regulation initiatives; and 4) initiatives to raise awareness and educate through media literacy programs (O'Neill, 2018; Labio-Bernal, Romero-Domínguez and García-Orta, 2020). Overall, all of these fundamental pillars have been maintained throughout the different stages of the plan's implementation, increasing awareness regarding the importance of protecting minors, their dignity, and their privacy in the digital environment. Hence, in the second stage of the program ("Safer internet plus", 2005-2008), the need to expand the action's strategies according to the changes occurring in terms of technology and communication trends was highlighted (EUR-Lex, 2009). The third stage of the program was launched in 2009, more precisely in the context of a consolidated online environment, which was even more used by children, despite them being significantly vulnerable (IRIS plus EAO, 2015).

Since the implementation of this first project, several European institutions have developed quite intense initiatives, such as:

- 1) The "dotSAFE" program.
- 2) The "Safer internet forum", since 2004, with legal authorities, representatives from the industry, civil organisations (child protection groups, parent-teacher associations, and consumer groups), and legislative institutions.
- 3) Insafe and INHOPE, referring to a global network of hotlines for reporting illegal content online with the goal of eliminating online child sexual abuse.
- 4) "EU kids online", consisting in mapping experiences of children online in order to assess their safety and risks on websites.
- 5) "Mediappro", which is a media literacy project.
- 6) "SIP-Bench" program, referring to parental control strategies.
- 7) The celebration of Safer Internet Day.
- 8) The creation of the "Internet governance forum".
- 9) The establishment of several points of contact where children can get educated about navigating safely on the internet and on how to combat cyberbullying and online sexual abuse Safer Internet Centres (SICs).
- 10) The Poscon (Positive Online Content and Services for Children in Europe) Network.
- 11) The European NGO Alliance for Child Safety Online.

- 12) The Net Children Go Mobile.
- 13) And the SPIRTO (Self-Produced Images Risk Taking Online) (IRIS plus EAO, 2015).

The final stage of the program which began in 2014, is still underway today and is focusing on specific areas of action, namely:

- 1) To increase awareness and empowerment, which includes teaching digital literacy and online safety, in all schools within the EU.
- 2) To encourage the production of educational and creative online content for children and promote positive online experiences for children.
- 3) To combat online child sexual abuse material, as well as sexual exploitation of children.
- 4) To create a safe environment for children, mainly through age-appropriate privacy configurations, age-based and content-based classifications, and broader use of parental controls (IRIS plus EAO, 2015).

Still, it is noteworthy to mention that this last stage of the program was only launched after the publication of two specific documents in 2012, with one examining the biggest challenges in the online sector regarding child protection and the other introducing a new line of action that was dedicated to the promotion of quality content for minors (Council of the European Union, 2012; European Commission, 2012). The concept of "quality content" for minors refers to content that increases their skills, knowledge, and competencies, emphasising creativity and being reliable and safe. Furthermore, the same document also recognises that this type of content can encourage better web use, namely if children are also involved in creating such content. This recognition differs from previous and earlier stages, considering that the EU had only highlighted the importance of the parents, educators and civil society's roles in making such digital environment safe, hence leaving the creation, production and distribution of online content to the relevant industry (Council of the European Union, 2012; European Commission, 2012).

The new campaign POCC ("Positive Online Content Campaign") aims to raise awareness regarding the importance of quality content for minors while simultaneously encouraging the involvement of children and young people in creating such content, promoting a safe online environment and experience to minors overall (POOC, 2019). The rationale of this specific program is that by exposing children to high-quality online content in their first online experiences, they will be able to learn to fully recognise the components of positive and appropriate content and services in the digital environment (Council of the European Union, 2012; POOC, 2019).

Nowadays, all these challenges are incorporated in the "Better Internet for Kids" (BIK) program, which consists of a hub for research, practices, cooperation networks and a wide range of media literacy initiatives (BIK, 2021). The case of Spain must be highlighted since it has addressed the BIK in a broader context, including broader policy initiatives. For instance, in 2013, Spain published one of the most relevant general political frameworks, the *Digital Agenda for Spain*, serving as an umbrella program for government actions directly related to the information society and the digital agenda (Gobierno de España, 2013). The following year, Spain launched the *Spanish national cybersecurity strategy*, essentially covering areas related to promoting a

culture of cyber security for all citizens in general and increasing online protection levels (European Audiovisual Observatory, 2016; Gobierno de España, 2019).

Even though there was a change in policy regarding the inclusion of creative and quality content by children, the EU has traditionally shown a significant preference for self-regulation, which has been expressed in multiple initiatives since 2007. Indeed, in that year, the European Commission published the *European framework for safer mobile use by younger teenagers and children*, which was the outcome of the work developed by the High-Level Group on Child Protection, comprising the following members: mobile operators, GSMA Europe, child protection organisations, content providers, and the European Commission (European Commission, 2007; GSMA Europe, 2021). Furthermore, the mobile operators and the content providers that comprise this group also signed the Agreement on Safer Internet Day, and since then have been working on its implementation, namely by encouraging the participation of even more mobile operators, as well as by ensuring the development of national codes of conduct for self-regulation, aiming to make it easier to implement such agreements (European Commission, 2007; GSMA Europe, 2021).

In 2012, several members of the GSMA Europe joined the ICT Coalition, which aimed for safer use of connected devices and online services by children and young people (ICT Coalition, 2021). In more detail, some of the companies that ended up joining this initiative were: Apple, BSkyB, BT, Dailymotion, Deutsche Telekom, Facebook, France Telecom-Orange, Google, Hyves, KPN, Liberty Global, LG Electronics, Mediaset, Microsoft, Netlog, Nintendo, Nokia, Opera Software, Research in Motion, RTL Group, Samsung, Skyrock, Stardoll, Sulake, Telefonica, TeliaSonera, Telecom Italia, Telenor Group, Tuenti, Vivendi, and Vodafone. (Labio-Bernal, Romero-Domínguez and García-Orta, 2020, p. 137)

More recently, in 2016, the initiative changed its name to "Alliance to better protect minors online" (The alliance to better protect minors online, 2017). The Alliance includes all the following member companies:

ASKfm, BT Group, Deutsche Telekom, Disney, Facebook, Google, KPN, the Lego Group, Liberty Global, Microsoft, Orange, Rovio, Samsung Electronics, Sky, Spotify, Sulake, Super RTL, TIM (Telecom Italia), Telefónica, Telenor, Telia Company, Twitter, Vivendi, and Vodafone. (Labio-Bernal, Romero-Domínguez and García-Orta, 2020, p. 137)

In addition to these company members, the initiative also included the participation of other associations, such as: "BBFC, Child Helpline International, Coface, Enacso, EUN Partnership, FFTelecoms, FOSI, FSM, GSMA, ICT Coalition, NICAM, Toy Industries of Europe, and Unicef" (Labio-Bernal, Romero-Domínguez and García-Orta, 2020, p. 137). In sum, the Alliance has emerged due to recognising the constant risks associated with online services, proposing the identification of potential areas where minors' safety and rights could be compromised. Thus, the combination of parents' efforts, national and international organisations, educators, civil society, and public authorities in a global approach guarantees the protection of minors in the digital environment (The alliance to better protect minors online, 2017).

Parental Control: An Overview

Overall, minors's experiences with digital technologies involve an increasing quota of young users born and developing in environments where digital technologies are widely available and

used. Nowadays, this occurs from early infancy, since children aged 2-4 years use touchscreen devices, such as smartphones or tablets, to play or watch movies, and parents frequently introduce these digital technologies to their children to use them in certain social situations (Mascheroni and Ólafsson, 2014; Smahel *et al.*, 2020; YPULSE, 2021).

Considering the most recent report on the worldwide internet diffusion among young people, one in three users is estimated to be a child or teenager (under 18) (UNICEF, 2019). Moreover, the report depicts that children mostly use digital technologies at home, with more intense and prolonged activities during the weekends. Also, children often use digital technologies at school at least a day a week (UNICEF, 2019). Therefore, it is evident that the access to digital technologies is expanding among young generations, which justifies why this reality ends up raising questions as to how to guarantee young generations the opportunities offered by new technologies (to study, to socialise or to enhance their skills), and on how to protect them from potential dangers of the digitalised world or harmful content (i.e., contact with unknown people and exposure to pornographic or violent content) (The alliance to better protect minors online, 2017; Livingstone, Winther and Saeed, 2019).

Nonetheless, parents are also directly exposed to digital technologies in many fields of their life. These new technologies have changed how family members communicate, enjoy themselves, acquire information, and solve daily problems. Still, parents are the first mediators of their childrens' experiences in digital environments: they integrate digital technologies into their ordinary routines, promoting both constructive and safe uses (Smahel *et al.*, 2020). Thus, the concept of digital parenting emerges, consisting of a description of their practices and efforts to comprehend, support, and regulate their childrens' activities in such digital environments (Livingstone and Helsper, 2008).

Some studies of young digital users (9-16 years old) in many European countries have compared parents' opinions before and after the diffusion of mobile services (Livingstone *et al.*, 2012; Mascheroni and Cuman, 2014). After four years, most parents declare that they know less about their kids' online activities and have more difficulties closely monitoring their digital technologies usage. However, parents are more aware of the risks of using the web, preferring to talk to their children about Internet security rather than limiting or even prohibiting Internet use (Livingstone *et al.*, 2017). Hence, parents can either encourage or limit the use of digital technologies to their children, according to the opportunities or danger they attribute to them (Smahel *et al.*, 2020).

In this sense, a new parenting style emerged, being completely different from the traditional ones (i.e., authoritative parenting, laissez-faire parenting, authoritarian parenting, and permissive parenting) – the internet parenting style (Darling and Steinberg, 1993; W.F. Lau and H.K. Yuen, 2013). Parenting styles refer to the context in which parents raise and socialise with their children, comprehending two different dimensions: responsiveness/warmth (involvement, acceptance, and affect that they express towards the childs' needs) and demandingness/control (rules, control, and maturity expectations for the childs' socialisation) (Darling and Steinberg, 1993).

Regarding the internet parenting style, researchers have identified the key dimensions of parental warmth/control more strictly related to the childs' behaviours on the Internet/digital

technologies (Table 1). It is essential to mention that these internet parenting styles are related to the childrens' use of digital technologies – for instance, a low parental control might result in more time of Internet usage by children (Valcke *et al.*, 2010; W.F. Lau and H.K. Yuen, 2013).

Table 1. Key dimensions of the internet parenting style (Valcke et al., 2010, p. 89).

Style dimensions	Item/Examples	
	Supervision: "I'm around when my child surfs on the Internet"	
Parental control	Stopping internet usage: "I stop my child when he/she visits a less	
	suitable website"	
	Internet usage rules: "I limit the time my child is allowed on the Internet"	
	Communication: "I talk with my child about the dangers related to the	
Parental warmth	Internet"	
	Support: "I show my child 'child friendly' websites."	

Internet parenting styles also depend on the childrens' characteristics, such as age, self-esteem, emotional regulation, and behavioural problems. More specifically, styles vary and accommodate childrens' age. For instance, parents who adopt an authoritative style when children are in infancy tend to become more permissive as children get older (Martínez *et al.*, 2019). Nonetheless, parental mediation, which differs from parenting styles, is more important to the present study, considering that it refers to "the diverse practices through which parents try to manage and regulate their children's experiences with the media" (Livingstone *et al.*, 2015, p. 7). There are two broad mediation approaches among the existing literature: *enabling* (or *instructive*) mediation and *restrictive* mediation (Livingstone *et al.*, 2017). Table 2 summarises the main parental mediation strategies, providing some examples regarding the most common practices.

Table 2. Main parental mediation strategies and examples of common practices (Coyne *et al.*, 2017).

Parental mediation	Examples of common practices	
strategy		
Enabling or active mediation	Parents engage in different activities to enhance the kid's appropriate use of the digital technologies (explain the usage of the device and/or talk about the contents)	
Co-use or co-viewing	Parents are present when the kid displays the activity with the	
mediation	media but do not talk about the content	
	Strict attention to rules and control to the kid's digital activities	
Restrictive mediation	(rules of when the kid can use digital technologies or pose time	
	restrictions)	
Technical restriction	Adoption of software applications or other technical tools to	
	control the kid's activities (filters on PC for the kid's safety)	

The enabling or active mediation is the most common approach in European families with 9-16 years old children, while restrictive mediation is more frequent in families with younger children (Livingstone *et al.*, 2017). Therefore, it is possible to conclude that parental mediation regarding digital technologies also changes according to the kids' ages, aiming to suit their needs better and protect them from online harm.

Regarding parental control, it is vital to this study to approach the EU Kids Online Project. Essentially, this project was funded by the European Commission's Safer Internet Programme, consisting of a thematic network that aimed to identify, compare, and draw conclusions from existing research about children and online technologies in Europe (Livingstone and Haddon, 2009; EU Kids Online, 2021). Furthermore, this project constructed a publicly accessible, as well as searchable, database of nearly 400 studies conducted across Europe, which is why EU Kids Online has concluded that the existing research is "unevenly distributed across Europe, with most in Germany, the UK, Denmark and least in Cyprus, Bulgaria, Poland, Iceland, Slovenia and Ireland" (Livingstone and Haddon, 2009, p. 236).

In another report, it has been established that "EU Kids Online is a thematic network designed to inform this policy context by examining European research (national and multi-national) on cultural, contextual and risk issues in children's safe use of the internet and online technologies" (De Haan and Livingstone, 2009, p. 3). The programme explicitly addresses three intersecting domains:

- 1) Children (mainly up to 18 years old), their families, domestic users.
- 2) Online technologies: mainly but not only the internet; focusing on use and risk.
- 3) European empirical research and policy, prioritising the 21 countries in the network (De Haan and Livingstone, 2009, p. 3).

After analysing the existing research within the scope of the EU Kids Online project, it is possible to conclude that children can encounter four main types or forms of risks in digital technologies and four types of online opportunities (Table 3).

Table 3. Risks and opportunities for children in digital technologies (De Haan and Livingstone, 2009, p. 5)

		2007, p.		
		Content:	Contact:	Conduct:
		Child as recipient	Child as participant	Child as actor
	Education	Educational resources	Contact with others	Self-initiated or
	learning and		who share one's	collaborative
	digital literacy		interests	learning
	Participation	Global information	Exchange among	Concrete forms of
	and civic		interest groups	civic engagement
လ္က	engagement			
OPPORTUNITIES	Creativity and	Diversity of resources	Being invited/inspired	User-generated
N	self-		to create or participate	content creation
	expression			
R.	Identity and	Advice	Social networking,	Expression of
) P	social	(personal/health/sexual	shared experiences	identity
0P	connection	etc)	with others	
	Commercial	Advertising, spam,	Tracking/harvesting	Gambling, illegal
		sponsorship	personal info	downloads, hacking
	Aggressive	Violent/gruesome/hateful	Being bullied, harassed	Bullying or
		content	or stalked	harassing another
	Sexual	Pornographic/harmful	Meeting strangers,	Creating/uploading
		sexual content	being groomed	pornographic
				material
S	Values	Racist, biased info/advice	Self-harm, unwelcome	Providing advice e.g.,
RISKS		(e.g., drugs)	persuasion	suicide/pro-
RI				anorexia

Still, and since the EU Kids Online project is a part of the Safer Internet plus Programme, the main emphasis is on online risks. Considering this specific focus, the significant policy recommendations of the EU Kids Online project aim to safeguard children and young people from negative experiences, where parental control or mediation is one of the critical strategies (De Haan and Livingstone, 2009).

In a more recent report, Zaman and Nouwen (2016) note there is an increasing number of parental controls and technology tracking and monitoring technologies in the market. They were initially launched as tools, apps (applications) or services that parents can rely on to keep their children safe, allowing them to prevent their kids from seeing inappropriate online content, detect cyberbullying at early stages, and limit chatting or in-app purchases. The following table (Table 4) summarises the current parental controls in the market, categorising them according to their function, implementation, and design initiator (Zaman and Nouwen, 2016).

Table 4. Parental controls' categorisation according to function, implementation, and design initiator (Zaman and Nouwen, 2016)

Axes	Туре	Functionalities
12100	-350	Limit the time kids can spend online
	Time restrictions	(Some apps allow the definition of specific time slots during
		which the kid can go online on weekdays or weekends)
	Content restrictions:	
	- Incoming content	Filtering content, allowing pre-approved content only,
Function	interventions	blocking pre-defined inappropriate content
	- Outgoing content	Blocking the type of information that can be uploaded or
	interventions	emailed
	Activity restrictions:	
	- Economic activities	Blocking online purchases
	- Social activities	Limit the people with whom the kid can interact
	- Entertainment activities	Blocking multiplayer games
	Monitoring and tracking	Monitor kids' online activities and follow-up actions
	Operating systems	Windows and iOS
	Web browsers	E.g., a kids' browser that functions as a "walled garden."
	Computer control	Program designed to protect the kid online, typically using a
	software	combination of restrictive functionalities
	Mobile devices	Create restricted user profiles to limit access to
Implementation		features/content on tablets or phones and limit access to
		certain apps
	Home network	E.g., router-based solutions that filter internet content before
		it enters the house
	Game consoles	
	Telecoms operators	System of parental controls to prevent content being seen by
		minors
	Software providers	
	Social networking site	Strict privacy settings for kids
	owners	
Doolan initiate:	Hardware manufacturers	Administrator controls to set up a restricted profile for kids
Design initiator		(password protection, content, activity restrictions)
	Game platform owners	
	Content providers	

Even though there are several studies about parental controls, the literature has not yet reached a conclusive answer regarding their effectiveness in reducing childrens' online risks. Some research supports the effectiveness of preventive software, especially filtering, blocking, and

monitoring software, in reducing unwanted exposure to online sexual material for kids (10-15 years old). Nonetheless, the evidence cannot be generalised to all ages (Ybarra *et al.*, 2009). In a separate study, the obtained results demonstrated that parental controls failed to reduce online risks for kids, which highlights the need for further studies in this area of expertise (Duerager and Livingstone, 2012).

Moreover, the conducted research fails in another aspect, directly related to the parents' determination to use parental controls to keep their children safe in digital environments. For instance, parents of children aged 10 to 15 years old were stated to be more likely to adopt filtering software than parents of children aged 16 to 17 years old. In contrast, parents that do not trust their children are more likely to use filtering and blocking software to prevent their exposure to online sexual content (Mitchell, Finkelhor and Wolak, 2005).

According to Zaman and Nouwen (2016, p. 3), the contradictory research findings and conclusions regarding the effectiveness of parental controls are partly due to the following facts, which are currently missing:

- 1) A clear operationalisation of notions of technically mediated parental mediation.
- 2) An up-to-date categorisation of the wide diversity of existing tools.
- 3) An in-depth understanding of how parents use these tools (rather than whether parents use them).

Thus, it is vital to conduct more studies to better understand parents' current parental control practices and technologies to keep their children safe in the digital environment.

Companies and Private Sector - Self-Regulation Sector

To understand how social media companies are trying to protect children and adolescents from harmful content and any problem caused by the digital environment, it is important to address two specific initiatives within the self-regulation sector, namely the "Alliance to Better Protect Minors Online" (hereafter referred to as the Alliance) and the "ICT Coalition for Children Online" (hereafter referred to as the ICT Coalition) (The alliance to better protect minors online, 2017; ICT Coalition, 2021).

The Alliance consists of a self-regulatory initiative launched on the Safer Internet Day in 2017, comprising several Information and Communication Technology (ICT) and media companies, NGOs, and UNICEF, and aiming to better protect minors online by improving their online environment. According to the European Commission (2019, p. 14), the main idea behind the Alliance "is to build on companies' existing competencies in these fields to improve their products and services to combat harmful content, conduct and contact on the internet and making devices and services safer to use for minors". In the Statement of Purpose, which is the document that establishes the aims, the scope, and the method of the initiative, the Alliance's objectives are clearly defined. Overall, the Alliance aims to tackle three types of risks minors are exposed to on the internet, more precisely:

- 1) Harmful content, for instance violent or sexually exploitative content.
- 2) Harmful conduct, such as cyberbullying.
- 3) Harmful contact, such as coercion, "grooming", or sexual extortion (The alliance to better protect minors online, 2017; European Commission, 2019).

The Alliance started with 22 endorsing companies, including several network operators, online content and services providers, and manufacturers. By the end of 2017, three additional companies joined the Alliance, bringing to a total of 25 endorsing companies. Moreover, the Alliance has 13 Associate Members, including NGOs and UNICEF (The alliance to better protect minors online, 2017). The diversity of companies demonstrates the geographical scope of the Alliance. Their operations are developed in several EU Member States and other countries, demonstrating the initiative's global operations and scope. Table 5 summarises the Alliance's members and associate members according to their sectors, geographical scope, and organisation type.

Table 5 – Alliance members and associate members, their sector/organisation type, and geographical scope (European Commission, 2019)

	apinical scope (European Commission, 2019)	
Name	Sector/Organisation type	Geographical Scope
Endorsing Companies		Cl 1 1
ASKfm	Social media	Global
BT Group plc	Telecoms provider	European
Deutsche Telekom AG	Telecoms provider	European
Facebook	Social media	Global
Google Inc.	Technology (e.g., internet services,	Global
	software/electronics development)	
KPN	Telecoms provider	National
Liberty Global	Telecoms provider	Global
Microsoft Corporation	Technology (e.g., internet services,	Global
	software/electronics development)	
Orange Group	Telecoms provider	Global
Rovio Entertainment Ltd.	Video game developer	Global
SUPER RTL/Mediengruppe	Telecoms provider	European
RTL Deutschland		
Samsung Electronics	Technology (e.g., internet services,	Global
	software/electronics development)	
Sky	Telecoms provider	European
Snap Inc.	Social media	Global
Spotify AB	Entertainment	Global
Sulake Corporation Oy	Video game developer	European
Telefónica, S.A.	Telecoms provider	Global
Telenor Group	Telecoms provider	Global
Telia Company	Telecoms provider	Global
The LEGO Group	Entertainment	Global
The Walt Disney Company	Entertainment	Global
TIM SpA	Telecoms provider	National
Twitter	Social media	Global
Vivendi	Entertainment	Global
Vodafone Group Services	Telecoms provider	Global
Limited		
Associate Members		
BBFC	NGO	National
Child Helpline International	NGO	Global
COFACE Families Europe	NGO Association	European
eNACSO	NGO Association	European
EUN Partnership	Network of ministries	European
FFTelecoms	Trade Association	National
FOSI	Non-profit organisation	Global
FSM	Non-profit organization	National
GSM Association	Trade Association	Global
ICT Coalition	Self-regulatory initiative	European
NICAM	Institute	National
Toy Industries of Europe	Trade Association	European
UNICEF	International organisation	Global

On the other hand, the ICT Coalition consists of a self-regulatory consortium of internet companies representing the entire content, services, and devices value chain. Essentially, this initiative brings together, and for the first time, key industry players from across the communications and internet market, including online services, connectivity platforms, and connected gaming and mobile devices. The main goal of the ICT Coalition is to "encourage the safe and responsible use of online services and internet devices among children and young people and to empower parents and carers to engage with and help protect their children in the digital world" (O'Neill, 2014).

In 2012, the ICT Coalition announced a set of specific principles, aiming for the development of products/services to enhance the safety of minors online and referring to several areas: 1) content; 2) parental controls; 3) responding to abuse/misuse; 4) child abuse material or illegal contact; 5) privacy and control, and 6) education and awareness. Overall, this initiative's signatories to these principles ended up committing to:

- 1) Developing innovative strategies to enhance online safety and encouraging a responsible use of the internet and internet devices by children and young people.
- 2) Empowering parents and carers to engage with and help to protect their children.
- 3) Providing easily accessible, clear, and transparent information about online safety and behaviour.
- 4) Raising awareness of how, and to whom, to report abuse and concerns (O'Neill, 2014).

The 16 companies included in the ICT Coalition refer to 5 different content types: IPTV services/Video-on-demand; own- or third-party apps, other commercial content; user-generated content; communication/chat content; and cloud-hosting services (O'Neill, 2014). Table 6 presents the 16 companies that integrate this initiative and the corresponding type of content that they provide to their users.

Table 6. Companies that integrate the ICT Coalition and the type of content they provide to users (O'Neill, 2014, p. 12)

Type of content	Company	
IPTV services/Video on-	Deutsche Telekom, KPN, Orange, Portugal Telecom, TDC,	
demand	Telecom Italia, Telefónica, TeliaSonera, Vodafone	
Own- or third-party apps,	All (except TDC)	
other commercial content		
User-generated content	Facebook, Google, Portugal Telecom	
Communication/chat	Orange, Unibet, Google, Facebook, Telecom Italia, Portugal	
content	Telecom	
Cloud-hosting services	Deutsche Telekom, Vodafone, Portugal Telecom, Telecom Italia	

Ethical Dilemma

The concept of ethics is defined as the "systematic exploration of questions about how we should act concerning others" (Rhodes, 1986). Another concept directly related to this is ethical sensitivity, referring to the individual's conscience, whose actions might affect the welfare of others. Within the context of the digital environment, ethics involves four different aspects:

- 1) Determining whether the technological options either directly or indirectly affect another person negatively.
- 2) Developing an ideal plan of action.
- 3) Identifying the important values that are associated with each specific situation.
- 4) Implementing a solution/plan of action to be monitored and evaluated (Rest, 1982).

Moreover, it has been established that ethical choices occur along an ethical context continuum (ECC) and are influenced by the social and cultural norms prevalent where they occur and by the values people hold in a culture or society. In addition, the ECC allows people to evaluate the situation, question, or issue, namely if it is potentially harmful to others, neutral, or beneficial to others (Olcott *et al.*, 2015).

The main ethical frameworks that reflect the ethical philosophies that help to determine the action to be taken are: 1) duties; 2) best outcomes (harm-benefit); 3) rights; and 4) virtue-based approach. Overall, all these ethical frameworks are promoted and enforced through tools, namely the codes of conduct and ethical guidelines, and regulatory mechanisms, such as ethics review committees (UNICEF, 2012).

It is essential to mention the European Network of Ombudspersons for Children (ENOC), a not-for-profit organisation federating independent children's rights institutions (ICRIs) that aims to facilitate the promotion and protection of children's rights (Milovidov, 2019). The ENOC was launched in 1997, and its mandate is to:

- 1) Develop strategies for the implementation of the recommendations of the CRC.
- 2) Facilitate information sharing and exchange between its members.
- 3) At the international level, promote the establishment of ICRIs in countries where these do not yet exist and assist in their setup.
- 4) Encourage contact and mutual assistance between ICRIs and their members (Milovidov, 2019, p. 3).

According to Milovidov (2019, p. 5)

The impact on children and families is growing exponentially as new technologies are developed and themes such as "safety by design" or "privacy by design" are also being developed to reflect the ethical considerations being raised by the digital world. Along with ethical considerations, human rights issues, and other concerns, there are large disparities when we examine children's digital access, skills and use. (Milovidov, 2019, p. 5)

Taking into consideration the European context, nowadays, children can find support on several issues, such as radicalisation, cyberbullying, extremism, online child sexual exploitation, and hate speech, as well as seek assistance in terms of digital reputation, online sharing, identity, and footprints (Kirchschläger, 2019). Nonetheless, it is important to mention that society is currently having some difficulties applying appropriate standards to each new device, software, and platform to protect children and young people. In fact, the industry has been continuously looking at self-regulation while governments are trying to impose regulations on industry players. Still, the absence of effective standards results in the emergence of new areas of child online protection (Milovidov, 2019) (Table 7).

Table 7. Some of the new areas of child online protection issues that emerge due to the absence of effective standards (Milovidov, 2019)

Emerging issue	Impact on children and young adults	
Artificial intelligence	Impact on children's development, behaviours, and ability to	
o d	learn new skills	
Algorithms	Bias and discrimination on social media sites and websites	
Inclusion and access	Different inclusion and access to online environments	
LGBTQIA+	Identity and share with others when faced with discrimination,	
	hate speech, apps with conversion therapy	
Disability	Children with special needs face more online harms	
Ethnic minorities	Bias and discrimination continue online, with hate speech more	
	toxic	
Cybersecurity in family	Hacking, surveillance of webcams, home assistants	
homes		

Most recently, the Council of Europe 2016-2021 strategy for children's rights focuses on five specific areas, more precisely: equal opportunities, participation, violence-free life, child-friendly justice and digital environment rights (Council of Europe, 2016). Regarding the latter, it is being reinforced by the Recommendation CM/Rec(2018)7 of the Committee of Ministers to member states on guidelines to respect, protect, and fulfil the children's rights in the digital environment (Council of Europe, 2018). In sum, this Recommendation CM/Rec(2018)7 aims to ensure children's interaction and safety, including topics such as: the provision of child-friendly content, the protection of personal data, helplines and hotlines, resilience and vulnerability, and both the role and responsibilities of business enterprises (Council of Europe, 2018). Hence, the main goal is to reinforce the protection and safety of children and young people in the digital environment while simultaneously ensuring that their rights are always safe and guaranteed.

Analysis

Across the various topics discussed in this review was possible to answer the research question "who is responsible for ethically protecting minors in the digital environment?" outlined in the article's conclusion section below. Furthermore, this review resulted in another important delivery. The review's analysis made it possible to list 28 types of potential harmful content spread online, many of them promoted by SMIs (social media influencers), websites and bloggers. This list was formulated based on research studies, and real situations mainly focused on young people. This list can be seen below in Table 8. However, it is noteworthy that what is considered a harmful content will depend on the culture and country. Therefore, the list below is based on the author's interpretation.

Table 8. Types of Content, elaborated by the author (2022)

	oc of Contont	Courses
	es of Content	Sources (University and Missi Vin. 2014, Dieferense
1 Pron	noting products or brands	(Uzunoğlu and Misci Kip, 2014; Djafarova
		and Rushworth, 2017; Arora et al., 2019;
		Stoldt <i>et al.</i> , 2019; Jiménez-Castillo and
		Sánchez-Fernández, 2019; Audrezet, de
		Kerviler and Guidry Moulard, 2020;
		Goodman and Jaworska, 2020; Ki et al.,
		2020; Nafees <i>et al.</i> , 2021; Reinikainen <i>et</i>
		al., 2021; Sánchez-Fernández and Jiménez-
		Castillo, 2021; Zhou et al., 2021; Djafarova
		and Bowes, 2021; Kim and Kim, 2021;
		Masuda, Han and Lee, 2022; Cheung et al.,
0 0		2022; Farivar, Wang and Turel, 2022)
2 Pron	noting violent content	(Moreno et al., 2009; Gupta, 2019; Jordan,
		Kalin and Dabrowski, 2020; Frischlich,
		2021)
3 Pron	noting unhealthy food	(Harris and Graff, 2011; Coates et al.,
		2019; Qutteina et al., 2019b; Buente et al.,
		2020; Pollack et al., 2020; Kucharczuk,
		Oliver and Dowdell, 2022)
4 Pron	noting sexualised body image	(Allem et al., 2017; Guinta and John, 2018;
		Sumter, Cingel and Hollander, 2021)
5 Pron	noting an ideal body image	(VanderStoep and Johnston, 2009; Meier
		and Gray, 2014; Chua and Chang, 2016;
		Fardouly, Pinkus and Vartanian, 2017;
		Hogue and Mills, 2018; Kleemans et al.,
		2018; Raggatt <i>et al.</i> , 2018; Ando <i>et al.</i> ,
		2021; Jarman <i>et al.</i> , 2022; Roberts <i>et al.</i> ,
		2022)
6 Pron	noting an unrealistic lifestyle	(Goodman and Jaworska, 2020; Vasquez,
		2020; Martinelli, 2021; Lim <i>et al.</i> , 2022)
7 Pron	noting alcohol products or brands	(Hendriks et al., 2020; Carah and
		Brodmerkel, 2021; Russell <i>et al.</i> , 2021)
8 Pron	noting alcohol intake	(Egan and Moreno, 2011; Boyle et al.,
		2016, 2021; Curtis <i>et al.</i> , 2018; Hendriks <i>et</i>
	-	al., 2020)
9 Pron	noting cigarette smoking	(Yoo, Yang and Cho, 2016; Allem et al.,
		2017; Hébert <i>et al.</i> , 2017; Kong <i>et al.</i> ,
		2019; Cavazos-Rehg et al., 2021; Dalisay et
		al., 2022)
10 Pron	noting cigarette products or brands	(Hébert <i>et al.</i> , 2017; O'Brien <i>et al.</i> , 2020;
		Dalisay <i>et al.</i> , 2022)
11 Pron	noting drugs intake	(Moreno <i>et al.</i> , 2009; Allem <i>et al.</i> , 2017;
		Buente <i>et al.</i> , 2020; Dalisay <i>et al.</i> , 2022)
12 Pron	noting sexual or pornographic content	(Moreno et al., 2009; O'Keeffe and Clarke-
		Pearson, 2011; The Brown University
		Child and Adolescent Behavior Letter,
		2014; Uhls, Ellison and Subrahmanyam,

		2017; Guinta and John, 2018; Jennings,
		2021; Sanchez, 2022)
13	Promoting cyberbullying	(Moreno et al., 2009; O'Keeffe and Clarke-
		Pearson, 2011; The Brown University
		Child and Adolescent Behavior Letter,
		2014; Uhls, Ellison and Subrahmanyam,
1.4	D (' (1 11 '	2017; Guinta and John, 2018)
14	Promoting any type of bullying	(Abidin, 2019; Martínez <i>et al.</i> , 2019; Thelwall and Cash, 2021)
15	Promoting any type of abusive forms of	(Archer, 2019; De Regt, Montecchi and
	marketing	Ferguson, 2019; Wolf, Nalloor and Archer,
		2019; Davies and Hobbs, 2020; Goodwin,
		Joseff and Woolley, 2020; Hu et al., 2020;
		Lee and Theokary, 2021; Farivar, Wang
		and Turel, 2022; Leite, Pontes and de
		Paula Baptista, 2022)
16	Promoting incitement to racial hatred or	(Cammaerts, 2009; Kiai, 2015; Alakali,
	racial discrimination	Faga and Mbursa, 2017; Blaya, 2019;
		Clissold <i>et al.</i> , 2020)
17	Promoting any type of criminal activities	(Alakali, Faga and Mbursa, 2017; Allen and
		van Zyl, 2020; Jordan, Kalin and
		Dabrowski, 2020; Quincy and Manduza,
10	Dromating any forms of townships	2021; Sirola <i>et al.</i> , 2021; Baker, 2022)
18	Promoting any form of terrorism	(Harwood, 2019; Allen and van Zyl, 2020; Singh, 2020)
19	Promoting any content related to human	(Sierra-Rodríguez, Arroyo-Machado and
	trafficking	Barroso-Hurtado, 2022)
20	Promoting incitement to a religion or belief	(Commission of the European
		Communities, 1996)
21	Promoting fake news about politics	(Ferran, Turner and Faulders, 2018;
		Levitsky and Ziblatt, 2018; Singer and
		Brooking, 2018; Schirch, 2021)
22	Promoting fake news	(De Regt, Montecchi and Ferguson, 2019;
		11 11 . 1 0000 11 7
1		Hobbs et al., 2020; Al-Zaman, 2021;
		Leader et al., 2021; Lotito, Zanella and
22	Dromoting any kind of discrimination	Leader <i>et al.</i> , 2021; Lotito, Zanella and Casari, 2021; Baker, 2022)
23	Promoting any kind of discrimination Promoting cultural discrimination	Leader <i>et al.</i> , 2021; Lotito, Zanella and Casari, 2021; Baker, 2022) (Sinha-Roy and Ball, 2021)
23 24	Promoting any kind of discrimination Promoting cultural discrimination	Leader <i>et al.</i> , 2021; Lotito, Zanella and Casari, 2021; Baker, 2022) (Sinha-Roy and Ball, 2021) (Commission of the European
24	Promoting cultural discrimination	Leader <i>et al.</i> , 2021; Lotito, Zanella and Casari, 2021; Baker, 2022) (Sinha-Roy and Ball, 2021) (Commission of the European Communities, 1996)
		Leader <i>et al.</i> , 2021; Lotito, Zanella and Casari, 2021; Baker, 2022) (Sinha-Roy and Ball, 2021) (Commission of the European
24	Promoting cultural discrimination	Leader et al., 2021; Lotito, Zanella and Casari, 2021; Baker, 2022) (Sinha-Roy and Ball, 2021) (Commission of the European Communities, 1996) (Agence France-Presse, 2021; DeTuro,
25	Promoting cultural discrimination Promoting dangerous games Promoting risky experiences	Leader et al., 2021; Lotito, Zanella and Casari, 2021; Baker, 2022) (Sinha-Roy and Ball, 2021) (Commission of the European Communities, 1996) (Agence France-Presse, 2021; DeTuro, 2021) (Agence France-Presse, 2021; Sirola et al., 2021)
25	Promoting cultural discrimination Promoting dangerous games	Leader et al., 2021; Lotito, Zanella and Casari, 2021; Baker, 2022) (Sinha-Roy and Ball, 2021) (Commission of the European Communities, 1996) (Agence France-Presse, 2021; DeTuro, 2021) (Agence France-Presse, 2021; Sirola et al., 2021) (E. Coates et al., 2019; Pollack et al., 2020;
24 25 26	Promoting cultural discrimination Promoting dangerous games Promoting risky experiences	Leader et al., 2021; Lotito, Zanella and Casari, 2021; Baker, 2022) (Sinha-Roy and Ball, 2021) (Commission of the European Communities, 1996) (Agence France-Presse, 2021; DeTuro, 2021) (Agence France-Presse, 2021; Sirola et al., 2021) (E. Coates et al., 2019; Pollack et al., 2020; Hawkins, Farrow and Thomas, 2021;
24 25 26 27	Promoting cultural discrimination Promoting dangerous games Promoting risky experiences Promoting unhealthy food intake	Leader et al., 2021; Lotito, Zanella and Casari, 2021; Baker, 2022) (Sinha-Roy and Ball, 2021) (Commission of the European Communities, 1996) (Agence France-Presse, 2021; DeTuro, 2021) (Agence France-Presse, 2021; Sirola et al., 2021) (E. Coates et al., 2019; Pollack et al., 2020; Hawkins, Farrow and Thomas, 2021; Kucharczuk, Oliver and Dowdell, 2022)
24 25 26	Promoting cultural discrimination Promoting dangerous games Promoting risky experiences Promoting unhealthy food intake Promoting any type of coercion or sexual	Leader et al., 2021; Lotito, Zanella and Casari, 2021; Baker, 2022) (Sinha-Roy and Ball, 2021) (Commission of the European Communities, 1996) (Agence France-Presse, 2021; DeTuro, 2021) (Agence France-Presse, 2021; Sirola et al., 2021) (E. Coates et al., 2019; Pollack et al., 2020; Hawkins, Farrow and Thomas, 2021; Kucharczuk, Oliver and Dowdell, 2022) (Albert and Salam, 2012; Leber and
24 25 26 27	Promoting cultural discrimination Promoting dangerous games Promoting risky experiences Promoting unhealthy food intake	Leader et al., 2021; Lotito, Zanella and Casari, 2021; Baker, 2022) (Sinha-Roy and Ball, 2021) (Commission of the European Communities, 1996) (Agence France-Presse, 2021; DeTuro, 2021) (Agence France-Presse, 2021; Sirola et al., 2021) (E. Coates et al., 2019; Pollack et al., 2020; Hawkins, Farrow and Thomas, 2021; Kucharczuk, Oliver and Dowdell, 2022) (Albert and Salam, 2012; Leber and Abrahams, 2019; Albury et al., 2020;
24 25 26 27	Promoting cultural discrimination Promoting dangerous games Promoting risky experiences Promoting unhealthy food intake Promoting any type of coercion or sexual	Leader et al., 2021; Lotito, Zanella and Casari, 2021; Baker, 2022) (Sinha-Roy and Ball, 2021) (Commission of the European Communities, 1996) (Agence France-Presse, 2021; DeTuro, 2021) (Agence France-Presse, 2021; Sirola et al., 2021) (E. Coates et al., 2019; Pollack et al., 2020; Hawkins, Farrow and Thomas, 2021; Kucharczuk, Oliver and Dowdell, 2022) (Albert and Salam, 2012; Leber and

CONCLUSION

The key learning points from our review of "who is responsible for ethically protecting minors in the digital environment?" relies on pieces of evidence that the governments – the European Union and its countries, the private sector and parents have different roles in protecting minors in the digital environment, even though they and we are all responsible for youngers' protection within and out of the digital world. According to the International Save the Children Alliance (2008), supported by the United Nations, families, communities, governments and non-governmental organisations (NGOs) together play a vital role in realising minor's rights to protection. Thus, all the institutions present in our society are responsible for protecting minors.

The European Union has been acting through important programmes to ensure the safety of young people within the digital environment, such as the "EU kids online", consisting of mapping experiences of minors online to assess their safety and risks on websites. Another important aspect is the definition of what is good content for young people online, then "quality content" for minors refers to content that increases their skills, knowledge, and competencies, emphasising creativity and being reliable and safe (Council of the European Union, 2012).

Also, the digital environment perspective is included in the Council of Europe 2016-2021 strategy for children's rights focusing on five specific areas, more precisely: equal opportunities, participation, violence-free life, child-friendly justice and "digital environment" rights (Council of Europe, 2016). In addition, this is reinforced by the Recommendation CM/Rec(2018)7 of the Committee of Ministers to member states on guidelines to respect, protect, and fulfil the children's rights in the digital environment (Council of Europe, 2018). Finally, the Alliance depicts that a combination of efforts of parents, national and international organisations, educators, civil society, and public authorities in a global approach must guarantee the protection of minors in the digital environment.

From a parental control perspective, we have perceived that it is a challenge for them to track and control their childrens' actions online and have more difficulties closely monitoring their digital technologies usage (Duerager and Livingstone, 2012; Mascheroni and Ólafsson, 2014). However, parents are more aware of the risks of using the web, preferring to talk to their children about Internet security rather than limiting or even prohibiting Internet use (Livingstone *et al.*, 2017). Therefore, the best solution for parents is to encourage, prohibit or limit the use of digital technologies to their children, according to the opportunities or danger they attribute to them, although always trying to monitor and be part of their children's internet and social media habits. Furthermore, it is recommended that more studies be conducted to better understand parents' current parental control practices and technologies to keep their children safe in the digital environment, even though there are several applications and software to help parents to monitor their children online.

From the private sector standpoint, two specific initiatives are very important the "Alliance to Better Protect Minors Online" and the "ICT Coalition for Children Online", both acting to protect minors online. However, further research in the area is recommended to understand the real effectiveness of these programmes and the main actions to protect youth by the social media companies and their outcomes, such as content analysis and minimum age subscription. For example, one of the most challenging aspects for social media companies is to ensure that

minors under the minimum age subscription are not subscribing to their channels (O'Neill, 2013). This issue might be solved through a face recognition system using a document showing their age and picture simultaneously and submitted for evaluation prior to subscription (O'Neill, 2013).

In conclusion, from an ethical point of view, Rest (1982) established four different ethical aspects within the digital environment, as follows; a) Determining whether the technological options either directly or indirectly affect another person negatively; b) Developing an ideal plan of action; c) Identifying the important values that are associated with each specific situation; and d) Implementing a solution/plan of action to be monitored and evaluated. Therefore, it is recommended that the government/state and companies follow these ethical rules to develop efficient measures and programmes to protect minors in the digital environment. The responsibility to protect minors in the digital environment relies on us all and all institutions in our society, as the internet and social media are present in our daily lives. Although parents, government and the private sector have been acting directly to ensure the protection of young people, further research is recommended to evaluate the current programmes, to understand the parents' control, how to empower and effectively train and inform parents for better results as well as it is expected that companies and the government constantly update and review their programmes, policies and legislation in order to have outstanding results. An integrative response from parents, companies and the government might be the best measure, even though there are currently no studies in this regard and no standardised measures to ensure efficient control.

References

- 1. Abidin, C. (2019) 'Victim, rival, bully: Influencers' narrative cultures around cyberbullying', in *Narratives in research and interventions on cyberbullying among young people*. Springer, pp. 199–212.
- 2. Agence France-Presse, T. G. (2021) 'Italy blocks TikTok for certain users after death of girl allegedly playing "choking" game', *The Guardian*, January. Available at: https://www.theguardian.com/world/2021/jan/23/italy-blocks-tiktok-for-certain-users-after-death-of-girl-allegedly-playing-choking-game.
- 3. Al-Zaman, M. S. (2021) 'Social media fake news in india', *Asian Journal for Public Opinion Research*, 9(1), pp. 25–47. doi: 10.15206/ajpor.2021.9.1.25.
- 4. Alakali, T. T., Faga, H. P. and Mbursa, J. (2017) 'Audience perception of hate speech and foul language in the social media in Nigeria: Implications for morality and law'.
- 5. Albert, C. S. and Salam, A. F. (2012) 'Predatory Coercion in Social Media and Protection of Children Online–A Critical Discourse Analysis Approach'.
- 6. Albury, K. *et al.* (2020) 'Dating apps as public health "problems": cautionary tales and vernacular pedagogies in news media', *Health Sociology Review*, 29(3), pp. 232–248.
- 7. Allem, J.-P. *et al.* (2017) 'Images of Little Cigars and Cigarillos on Instagram Identified by the Hashtag #swisher: Thematic Analysis', *Journal of Medical Internet Research*, 19(7), p. e255. doi: 10.2196/jmir.7634.
- 8. Allen, K. and van Zyl, I. (2020) 'Digital vigilantism, social media and cyber criminality', *ENACT EU*, (20), p. 16. Available at: https://enact-africa.s3.amazonaws.com/site/uploads/2020-12-02-digital-vigilantism-research-paper.pdf.
- 9. Ando, K. *et al.* (2021) 'Beauty ideals, social media, and body positivity: A qualitative investigation of influences on body image among young women in Japan', *Body Image*, 38, pp. 358–369. doi: 10.1016/j.bodyim.2021.05.001.

- 10. Archer, C. (2019) 'How influencer "mumpreneur" bloggers and "everyday" mums frame presenting their children online', *Media International Australia*, 170(1), pp. 47–56. doi: 10.1177/1329878X19828365.
- 11. Arora, A. *et al.* (2019) 'Measuring social media influencer index- insights from facebook, Twitter and Instagram', *Journal of Retailing and Consumer Services*, 49, pp. 86–101. doi: 10.1016/j.jretconser.2019.03.012.
- 12. Audrezet, A., de Kerviler, G. and Guidry Moulard, J. (2020) 'Authenticity under threat: When social media influencers need to go beyond self-presentation', *Journal of Business Research*, 117, pp. 557–569. doi: 10.1016/j.jbusres.2018.07.008.
- 13. Baker, S. A. (2022) 'Alt. Health Influencers: how wellness culture and web culture have been weaponised to promote conspiracy theories and far-right extremism during the COVID-19 pandemic', *European Journal of Cultural Studies*, 25(1), pp. 3–24. doi: 10.1177/13675494211062623.
- 14. BIK, T. B. I. for K. (2021) *The Better Internet for Kids (BIK)*, *The Better Internet for Kids (BIK)*. Available at: https://www.betterinternetforkids.eu/en-GB/ (Accessed: 4 November 2021).
- 15. Blaya, C. (2019) 'Cyberhate: A review and content analysis of intervention strategies', *Aggression and violent behavior*, 45, pp. 163–172.
- 16. Bloom, B. S. *et al.* (1956) *Taxonomy of educational objectives: The classification of educational goals.* Edited by D. M. Co. New York, NY, USA: Longmans.
- 17. Boyle, S. C. *et al.* (2016) 'Different digital paths to the keg? How exposure to peers' alcohol-related social media content influences drinking among male and female first-year college students', *Addictive Behaviors*, 57, pp. 21–29. doi: 10.1016/j.addbeh.2016.01.011.
- 18. Boyle, S. C. *et al.* (2021) 'Integrating social media inspired features into a personalized normative feedback intervention combats social media-based alcohol influence', *Drug and Alcohol Dependence*, 228, p. 109007. doi: 10.1016/j.drugalcdep.2021.109007.
- 19. Bryman, A. (2004) *Quantity and Quality in Social Research (Contemporary Social Research)*. New York, NY, USA: Taylor & Francis Group Routledge. Available at: https://www.academia.edu/28944371/Alan_Bryman_Quantity_and_Quality_in_Social_Research_Contemporary_Social_Research_?auto=download.
- 20. Buente, W. *et al.* (2020) 'Tradition Gone Mobile: An Exploration of #Betelnut on Instagram', *Substance Use & Misuse*, 55(9), pp. 1483–1492. doi: 10.1080/10826084.2020.1744657.
- 21. Cammaerts, B. (2009) 'Radical pluralism and free speech in online public spaces: The case of North Belgian extreme right discourses', *International journal of cultural studies*, 12(6), pp. 555–575.
- 22. Carah, N. and Brodmerkel, S. (2021) 'Alcohol Marketing in the Era of Digital Media Platforms', *Journal of Studies on Alcohol and Drugs*, 82(1), pp. 18–27. doi: 10.15288/jsad.2021.82.18.
- 23. Cavazos-Rehg, P. *et al.* (2021) 'Exploring How Social Media Exposure and Interactions Are Associated With ENDS and Tobacco Use in Adolescents From the PATH Study', *Nicotine & Tobacco Research*, 23(3), pp. 487–494. doi: 10.1093/ntr/ntaa113.
- 24. Cheung, M. L. *et al.* (2022) "I follow what you post!": The role of social media influencers' content characteristics in consumers' online brand-related activities (COBRAs)', *Journal of Retailing and Consumer Services*, 66(February), p. 102940. doi: 10.1016/j.jretconser.2022.102940.
- 25. Chua, T. H. H. and Chang, L. (2016) 'Follow me and like my beautiful selfies: Singapore teenage girls' engagement in self-presentation and peer comparison on social media', *Computers in Human Behavior*, 55, pp. 190–197. doi: 10.1016/j.chb.2015.09.011.
- 26. Clissold, E. *et al.* (2020) 'Pandemics and prejudice', *International Journal of Social Psychiatry*. SAGE Publications Sage UK: London, England, pp. 421–423.
- 27. Coates, A. E. *et al.* (2019) 'Food and Beverage Cues Featured in YouTube Videos of Social Media Influencers Popular With Children: An Exploratory Study', *Frontiers in Psychology*, 10(2142).

- 28. Commission of the European Communities, E. (1996) *Communication on illegal and harmful content on the internet*. Brussels. doi: ISBN 92-78-10301-2.
- 29. Council of Europe, O. (2016) *Council of Europe strategy for the rights of the child (2016-2021)*. Strasbourg. Available at: https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=0900001680 66cff8.
- 30. Council of Europe, O. (2018) *Guidelines to respect, protect and fulfil the rights of the child in the digital environment: Recommendation CM/Rec(2018)7 of the Committee of Ministers*. Strasbourg. Available at: https://rm.coe.int/guidelines-to-respect-protect-and-fulfil-the-rights-of-the-child-in-th/16808d881a.
- 31. Council of the European Union, O. (2012) *Council conclusions on the European strategy for a better internet for children*. Brussels. Available at: https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/educ/133824.pdf.
- 32. Coyne, S. M. *et al.* (2017) 'Parenting and Digital Media', *Pediatrics*, 140(Supplement 2), pp. S112–S116. doi: 10.1542/peds.2016-1758N.
- 33. Curtis, B. L. *et al.* (2018) 'Meta-Analysis of the Association of Alcohol-Related Social Media Use with Alcohol Consumption and Alcohol-Related Problems in Adolescents and Young Adults', *Alcohol. Clin.Exp.Res. Copyright by the Research Society on Alcoholism*, 42, pp. 978–986.
- 34. Dalisay, F. *et al.* (2022) 'Exposure to tobacco and betel nut content on social media, risk perceptions, and susceptibility to peer influence among early adolescents in Guam', *Addictive Behaviors Reports*, 15(November 2021), p. 100405. doi: 10.1016/j.abrep.2021.100405.
- 35. Darling, N. K. and Steinberg, L. D. (1993) 'Parenting Style as Context: An Integrative Model', *Psychological Bulletin*, 113, pp. 487–496.
- 36. Davies, C. and Hobbs, M. (2020) 'Irresistible possibilities: Examining the uses and consequences of social media influencers for contemporary public relations', *Public Relations Review*, 46(5), p. 101983. doi: 10.1016/j.pubrev.2020.101983.
- 37. DeTuro, B. (2021) 'The Virality of Horror Trends on Social Media'. MAPC, The University of Tampa.
- 38. Djafarova, E. and Bowes, T. (2021) "Instagram made Me buy it": Generation Z impulse purchases in fashion industry', *Journal of Retailing and Consumer Services*, 59, p. 102345. doi: 10.1016/j.jretconser.2020.102345.
- 39. Djafarova, E. and Rushworth, C. (2017) 'Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users', *Computers in Human Behavior*, 68, pp. 1–7. doi: 10.1016/j.chb.2016.11.009.
- 40. Duerager, A. and Livingstone, S. (2012) *How can parents support children's internet safety?* London, United Kingdom. Available at: http://eprints.lse.ac.uk/42872/1/How can parents support children's internet safety%28lsero%29.pdf.
- 41. E. Coates, A. *et al.* (2019) 'Social Media Influencer Marketing and Children's Food Intake: A Randomized Trial', *Pedriatics*, 143(4).
- 42. Egan, K. G. and Moreno, M. A. (2011) 'Alcohol References on Undergraduate Males' Facebook Profiles', *American Journal of Men's Health*, 5(5), pp. 413–420. doi: 10.1177/1557988310394341.
- 43. EU Kids Online, L. S. of E. and P. S. (2021) *EU Kids Online, EU Kids Online*. Available at: https://www.lse.ac.uk/media-and-communications/research/research-projects/eu-kids-online (Accessed: 4 November 2021).
- 44. EUR-Lex, E. U. L. (2009) Safer Internet Programme 2005-2008 (Safer Internet Plus), Safer Internet Programme 2005-2008 (Safer Internet Plus) ACT Decision No 854/2005/EC. Available at: https://eurlex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3Al24190b (Accessed: 4 November 2021).
- 45. European Audiovisual Observatory, O. (2016) *Mapping of media literacy practices and actions in EU-28*. Strasbourg. Available at: https://rm.coe.int/1680783500.

- 46. European Commission, O. (2007) 'European framework for safe mobile use by teenagers and children'. Brussels: European Commission, pp. 1–3. Available at: https://www.gsma.com/gsmaeurope/wp-content/uploads/2012/04/saferchildren.pdf.
- 47. European Commission, O. (2012) *European Strategy for a Better Internet for Children*. Brussels. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52012DC0196&from=EN.
- 48. European Commission, O. (2019) *Evaluation of the implementation of the alliance to better protect minors online*. Brussels. Available at: https://op.europa.eu/en/publication-detail/-/publication/122e3bdd-237b-11e9-8d04-01aa75ed71a1/language-en.
- 49. Fardouly, J., Pinkus, R. T. and Vartanian, L. R. (2017) 'The impact of appearance comparisons made through social media, traditional media, and in person in women's everyday lives', *Body Image*, 20, pp. 31–39. doi: 10.1016/j.bodyim.2016.11.002.
- 50. Farivar, S., Wang, F. and Turel, O. (2022) 'Computers in Human Behavior Followers' problematic engagement with influencers on social media: An attachment theory perspective', *Computers in Human Behavior*, 133(November 2021), p. 107288. doi: 10.1016/j.chb.2022.107288.
- 51. Ferran, L., Turner, T. and Faulders, K. (2018) 'Russia targeted African-American vote, made Instagram "key battleground" in propaganda war: Researchers'. Available at: https://abcnews.go.com/Politics/russia-targeted-african-american-vote-madeinstagram-key/story?id=59862038.
- 52. Frischlich, L. (2021) '#Dark inspiration: Eudaimonic entertainment in extremist Instagram posts', *New Media & Society*, 23(3), pp. 554–577. doi: 10.1177/1461444819899625.
- 53. Gobierno de España, I. (2013) *Digital agenda for Spain*. Available at: https://plantl.mineco.gob.es/digital-agenda/Documents/digital-agenda-for-spain.pdf.
- 54. Gobierno de España, I. (2019) *Spanish national cybersecurity strategy*. Available at: https://www.ccn-cert.cni.es/en/pdf/documentos-publicos/3812-national-cybersecurity-strategy-2019/file.html.
- 55. Goodman, M. K. and Jaworska, S. (2020) 'Mapping digital foodscapes: Digital food influencers and the grammars of good food', *Geoforum*, 117(September), pp. 183–193. doi: 10.1016/j.geoforum.2020.09.020.
- 56. Goodwin, A. M., Joseff, K. and Woolley, S. C. (2020) *Social Media Influencers and the 2020 U.S. Election: Paying 'Regular People' for Digital Campaign Communication, Center for Media Engagement*. Available at: https://mediaengagement.org/research/social-media-influencers-and-the-2020-election.
- 57. GSMA Europe, I. (2021) European Framework for Safer Mobile Use by Younger Teenagers and Children, European Framework for Safer Mobile Use by Younger Teenagers and Children GSMA. Available at: https://www.gsma.com/gsmaeurope/safer-mobile-use/european-framework/ (Accessed: 4 November 2021).
- 58. Guinta, M. R. and John, R. M. (2018) 'Social Media and Adolescent Health', *Pediatric Nursing*, 44(4), p. 6. Available at: https://workmanpep.weebly.com/uploads/8/2/3/8/8238383/social_media_and_adolescent_health.pdf.
- 59. Gupta, M. (2019) 'Are Social Media Influencers the New Celebrity? Youtubers and Their Impact on Adolescent Risk Perception'.
- 60. De Haan, J. and Livingstone, S. (2009) *Policy and research recommendations*. London, United Kingdom. Available at: https://www.researchgate.net/publication/313023025_Policy_and_Research_Recommendations_EU_Kids_Online.
- 61. Harris, J. L. and Graff, S. K. (2011) 'Protecting Young People From Junk Food Advertising: Implications of Psychological Research for First Amendment Law', *American Journal of Public Health*, 102(2), pp. 214–222. doi: 10.2105/AJPH.2011.300328.
- 62. Harwood, E. T. (2019) 'Terrorism and the Digital Right-Wing', *Contexts*, 18(3), pp. 60–62. doi: 10.1177/1536504219864961.

- 63. Hawkins, L., Farrow, C. and Thomas, J. M. (2021) 'Does exposure to socially endorsed food images on social media influence food intake?', *Appetite*, 165, p. 105424. doi: 10.1016/j.appet.2021.105424.
- 64. Hébert, E. T. *et al.* (2017) 'Exposure and Engagement With Tobacco- and E-Cigarette–Related Social Media', *Journal of Adolescent Health*, 61(3), pp. 371–377. doi: 10.1016/j.jadohealth.2017.04.003.
- 65. Hendriks, H. *et al.* (2020) 'Picture Me Drinking: Alcohol-Related Posts by Instagram Influencers Popular Among Adolescents and Young Adults', *Frontiers in Psychology*, 10(2991).
- 66. Hobbs, M. *et al.* (2020) 'Turf wars: Using social media network analysis to examine the suspected astroturfing campaign for the Adani Carmichael Coal mine on Twitter', *Journal of Public Affairs*, 20(2). doi: 10.1002/pa.2057.
- 67. Hogue, J. V and Mills, J. S. (2018) 'The effects of active social media engagement with peers on bodyimage in young women', *Body Image*, 28, pp. 1–5.
- 68. Hu, L. *et al.* (2020) 'Understanding followers' stickiness to digital influencers: The effect of psychological responses', *International Journal of Information Management*, 54(June). doi: 10.1016/j.ijinfomgt.2020.102169.
- 69. ICT Coalition, I. (2021) *ICT Coalition*. Available at: https://www.ictcoalition.eu/ (Accessed: 4 November 2021).
- 70. International Save the Children Alliance, I. (2008) *A Common Responsibility: The role of community-based child protection groups in protecting children from sexual abuse and exploitation*. London, United Kingdom. Available at: https://www.ohchr.org/Documents/Issues/ViolenceAgstChildren/ACommonResponsibility.pdf.
- 71. International Save the Children Alliance, O. (2008) *A Common Responsibility: The role of community-based child protection groups in protecting children from sexual abuse and exploitation*. London, United Kingdom. Available at: https://www.ohchr.org/Documents/Issues/ViolenceAgstChildren/ACommonResponsibility.pdf.
- 72. IRIS plus EAO, E. A. O. (2012) *IRIS plus 2012-6, Protection of Minors and Audiovisual Content On-Demand.* Strasbourg. Available at: https://rm.coe.int/1680783db7.
- 73. IRIS plus EAO, E. A. O. (2015) *The protection of minors in a converged media environment.* Strasbourg. Available at: https://rm.coe.int/1680783486.
- 74. Jarman, H. K. *et al.* (2022) 'Critical measurement issues in the assessment of social media influence on body image', *Body Image*, 40, pp. 225–236. doi: 10.1016/j.bodyim.2021.12.007.
- 75. Jennings, R. (2021) 'The sexfluencers', *Vox*, October. Available at: https://www.vox.com/thegoods/22749123/onlyfans-influencers-sex-work-instagram-pornography.
- 76. Jiménez-Castillo, D. and Sánchez-Fernández, R. (2019) 'The role of digital influencers in brand recommendation: Examining their impact on engagement, expected value and purchase intention', *International Journal of Information Management*, 49(February), pp. 366–376. doi: 10.1016/j.ijinfomgt.2019.07.009.
- 77. Jordan, L., Kalin, J. and Dabrowski, C. (2020) 'Characteristics of Gun Advertisements on Social Media: Systematic Search and Content Analysis of Twitter and YouTube Posts', *Journal of Medical Internet Research*, 22(3), p. e15736. doi: 10.2196/15736.
- 78. Kable, A. K., Pich, J. and Maslin-Prothero, S. E. (2012) 'A structured approach to documenting a search strategy for publication: A 12 step guideline for authors', *Nurse Education Today*, 32(8), pp. 878–886. doi: 10.1016/j.nedt.2012.02.022.
- 79. Ki, C.-W. (Chloe) *et al.* (2020) 'Influencer marketing: Social media influencers as human brands attaching to followers and yielding positive marketing results by fulfilling needs', *Journal of Retailing and Consumer Services*, 55, p. 102133. doi: 10.1016/j.jretconser.2020.102133.
- 80. Kiai, R. N. (2015) 'Factors affecting hate speech control for peace building in Kenyan social media. A case of Kenyan bloggers'. University of Nairobi.

- 81. Kim, D. Y. and Kim, H.-Y. (2021) 'Trust me, trust me not: A nuanced view of influencer marketing on social media', *Journal of Business Research*, 134, pp. 223–232. doi: 10.1016/j.jbusres.2021.05.024.
- 82. Kirchschläger, P. G. (2019) 'Homo Dignitatis Ethical Orientation for Digital Transformation', *Psychologie in Österreich*, 4(39), pp. 274–284. Available at: http://www.pioe.at/public/archiv/2019/4/PIOe_2019_4_Kirchschlaeger_Homo_digitalis_Ethische_Orientie rung_im_Zuge_digitaler_Transformation.pdf.
- 83. Kleemans, M. *et al.* (2018) 'Picture Perfect: The Direct Effect of Manipulated Instagram Photos on Body Image in Adolescent Girls', *Media Psychology*, 21(1), pp. 93–110. doi: 10.1080/15213269.2016.1257392.
- 84. Kong, G. et al. (2019) 'Promotion of Vape Tricks on YouTube: Content Analysis', *Journal of Medical Internet Research*, 21(6), p. e12709. doi: 10.2196/12709.
- 85. Kucharczuk, A. J., Oliver, T. L. and Dowdell, E. B. (2022) 'Social media's influence on adolescents' food choices: A mixed studies systematic literature review', *Appetite*, 168, p. 105765. doi: 10.1016/j.appet.2021.105765.
- 86. Labio-Bernal, A., Romero-Domínguez, L. R. and García-Orta, M. J. (2020) 'Protection of minors in the European digital audiovisual context: a necessary dialogue between parents, academy, regulators and industry', *Comunicação e Sociedade*, 37, pp. 127–146. doi: 10.17231/comsoc.37(2020).2162.
- 87. Leader, A. E. *et al.* (2021) 'Understanding the messages and motivation of vaccine hesitant or refusing social media influencers', *Vaccine*, 39(2), pp. 350–356. doi: 10.1016/j.vaccine.2020.11.058.
- 88. Leber, A. and Abrahams, A. (2019) 'A storm of tweets: Social media manipulation during the Gulf Crisis', *Review of Middle East Studies*, 53(2), pp. 241–258.
- 89. Lee, M. T. and Theokary, C. (2021) 'The superstar social media influencer: Exploiting linguistic style and emotional contagion over content?', *Journal of Business Research*, 132(June 2020), pp. 860–871. doi: 10.1016/j.jbusres.2020.11.014.
- 90. Leite, F. P., Pontes, N. and de Paula Baptista, P. (2022) 'Oops, I've overshared! When social media influencers' self-disclosure damage perceptions of source credibility', *Computers in Human Behavior*, 133(March), p. 107274. doi: 10.1016/j.chb.2022.107274.
- 91. Levitsky, S. and Ziblatt, D. (2018) Como as democracias morrem, Como as democracias morrem. Zahar.
- 92. Lim, M. S. C. *et al.* (2022) 'Young Adults' Use of Different Social Media Platforms for Health Information: Insights From Web-Based Conversations', *Journal of medical Internet research*, 24(1), p. e23656.
- 93. Livingstone, S. et al. (2012) Risks and safety on the internet: the perspective of European children: full findings and policy implications from the EU Kids Online survey of 9-16 year olds and their parents in 25 countries. London, United Kingdom. Available at: http://eprints.lse.ac.uk/33731/1/Risks and safety on the internet%28lsero%29.pdf.
- 94. Livingstone, S. et al. (2015) How parents of young children manage digital devices at home: The role of income, education and parental style. London, United Kingdom. Available at: https://eprints.lse.ac.uk/63378/1/_lse.ac.uk_storage_LIBRARY_Secondary_libfile_shared_repository_Conte nt_EU Kids Online_EU_Kids_Online_How parents manage digital devices_2016.pdf.
- 95. Livingstone, S. *et al.* (2017) 'Maximizing Opportunities and Minimizing Risks for Children Online: The Role of Digital Skills in Emerging Strategies of Parental Mediation', *Journal of Communication*, 67(1), pp. 82–105. doi: 10.1111/jcom.12277.
- 96. Livingstone, S. and Haddon, L. (2009) 'EU Kids Online', *Zeitschrift für Psychologie / Journal of Psychology*, 217(4), pp. 236–239. doi: 10.1027/0044-3409.217.4.236.
- 97. Livingstone, S. and Helsper, E. J. (2008) 'Parental Mediation of Children's Internet Use', *Journal of Broadcasting & Electronic Media*, 52(4), pp. 581–599. doi: 10.1080/08838150802437396.
- 98. Livingstone, S., Winther, D. K. and Saeed, M. (2019) *Global Kids Online: Comparative report.* Florence. Available at: https://www.unicef-irc.org/publications/1059-global-kids-online-comparative-report.html.

- 99. Lotito, Q. F., Zanella, D. and Casari, P. (2021) 'Realistic aspects of simulation models for fake news epidemics over social networks', *Future Internet*, 13(3), p. 76.
- 100. Lou, C. and HK, K. (2019) 'Fancying the New Rich and Famous? Explicating the roles of influencers, content, credibility, and parental mediation in adolescents' para social relationship, materialism and purchase intentions', *Frontier in Psychology*, 10, pp. 1–17.
- 101. Martinelli, A. (2021) 'The Need For Transparency in Diet Programs and their Marketing Campaigns'.
- 102. Martínez, I. *et al.* (2019) 'Parenting in the digital era: Protective and risk parenting styles for traditional bullying and cyberbullying victimization', *Computers in Human Behavior*, 90, pp. 84–92. doi: 10.1016/j.chb.2018.08.036.
- 103. Mascheroni, G. and Cuman, A. (2014) *Net children go mobile: Final Report (Deliverables D6.4, D5.2)*. Milano. Available at: http://eprints.lse.ac.uk/60231/1/_lse.ac.uk_storage_LIBRARY_Secondary_libfile_shared_repository_Conte nt Net Children Go Mobile Project Reports Net Children Go Mobile final report 2014.pdf.
- 104. Mascheroni, G. and Ólafsson, K. (2014) *Net Children Go Mobile: risks and opportunities. Second edition.* Milano. doi: 10.13140/RG.2.1.3590.8561.
- 105. Masuda, H., Han, S. H. and Lee, J. (2022) 'Impacts of influencer attributes on purchase intentions in social media influencer marketing: Mediating roles of characterizations', *Technological Forecasting and Social Change*, 174(October 2020), p. 121246. doi: 10.1016/j.techfore.2021.121246.
- 106. Meier, E. P. and Gray, J. (2014) 'Facebook Photo Activity Associated with Body Image Disturbance in Adolescent Girls', *Cyberpsychology, Behavior, and Social Networking*, 17(4), pp. 199–206. doi: 10.1089/cyber.2013.0305.
- 107. Milovidov, E. (2019) Children's rights in the digital environment: Paper for the European Network of Ombudspersons for Children (ENOC) on the evidence supporting the drafting of a statement on Children's rights in the digital environment. Strasbourg. Available at: http://enoc.eu/wp-content/uploads/2019/10/FINAL-ENOC-Evidence-Paper-Sept-2019.pdf.
- 108. Mitchell, K. J., Finkelhor, D. and Wolak, J. (2005) 'Protecting youth online: Family use of filtering and blocking software', *Child Abuse & Neglect*, 29(7), pp. 753–765. doi: 10.1016/j.chiabu.2004.05.008.
- 109. Moreno, M. A. *et al.* (2009) 'Display of Health Risk Behaviors on MySpace by Adolescents', *Archives of Pediatrics & Adolescent Medicine*, 163(1). doi: 10.1001/archpediatrics.2008.528.
- 110. Nafees, L. *et al.* (2021) 'Can social media influencer (SMI) power influence consumer brand attitudes? The mediating role of perceived SMI credibility', *Digital Business*, 1(2), p. 100008. doi: 10.1016/j.digbus.2021.100008.
- 111. O'Brien, E. K. *et al.* (2020) 'Social media use by leading US e-cigarette, cigarette, smokeless tobacco, cigar and hookah brands', *Tobacco Control*, p. tobaccocontrol-2019-055406. doi: 10.1136/tobaccocontrol-2019-055406.
- 112. O'Keeffe, G. S. and Clarke-Pearson, K. (2011) 'The Impact of Social Media on Children, Adolescents, and Families', *Pediatrics*, 127(4), pp. 800–804. doi: 10.1542/peds.2011-0054.
- 113. O'Neill, B. (2013) 'Who cares? Practical ethics and the problem of underage users on social networking sites', *Ethics and Information Technology*, 15(4), pp. 253–262. doi: 10.1007/s10676-013-9331-4.
- 114. O'Neill, B. (2014) First Report on the Implementation of the ICT Principles. Brussels. doi: 10.21427/D7PC9M.
- 115. O'Neill, B. (2018) Research for CULT Committee Child safety online: definition of the problem. Brussels. Available at: https://www.europarl.europa.eu/RegData/etudes/IDAN/2018/602016/IPOL_IDA(2018)602016_EN.pdf.
- 116. Olcott, D. *et al.* (2015) 'Ethics and Education in the Digital Age: Global Perspectives and Strategies for Local Transformation in Catalonia', *RUSC. Universities and Knowledge Society Journal*, 12(2), p. 59. doi: 10.7238/rusc.v12i2.2455.

- 117. Pollack, C. C. *et al.* (2020) 'Prevalence and strategies of energy drink, soda, processed snack, candy and restaurant product marketing on the online streaming platform Twitch', *Public Health Nutrition*, 23(15), pp. 2793–2803. doi: 10.1017/S1368980020002128.
- 118. POOC, T. P. O. C. C. (2019) *The Positive Online Content Campaign (POCC)*, *The Positive Online Content Campaign (POCC)*. Available at: https://www.positiveonlinecontentforkids.eu/campaign (Accessed: 4 November 2021).
- 119. Quincy, R. and Manduza, K. (2021) 'Sexual Behaviour Change on Youth in Digitalized World', *Journal La Medihealtico*, 2(4), pp. 8–13.
- 120. Qutteina, Y. *et al.* (2019a) 'What Do Adolescents See on Social Media? A Diary Study of Food Marketing Images on Social Media', *Frontiers in Psychology*, 10(2637).
- 121. Qutteina, Y. *et al.* (2019b) 'What Do Adolescents See on Social Media? A Diary Study of Food Marketing Images on Social Media', *Frontiers in Psychology*, 10. doi: 10.3389/fpsyg.2019.02637.
- 122. Raggatt, M. *et al.* (2018) "I aspire to look and feel healthy like the posts convey": engagement with fitness inspiration on social media and perceptions of its influence on health and wellbeing', *BMC Public Health*, 18(1), p. 1002. doi: 10.1186/s12889-018-5930-7.
- 123. De Regt, A., Montecchi, M. and Ferguson, S. L. (2019) 'A false image of health: How fake news and pseudofacts spread in the health and beauty industry', *Journal of Product & Brand Management*.
- 124. Reinikainen, H. *et al.* (2021) 'Making and breaking relationships on social media: the impacts of brand and influencer betrayals', *Technological Forecasting and Social Change*, 171(November 2020), p. 120990. doi: 10.1016/j.techfore.2021.120990.
- 125. Rest, J. R. (1982) 'A Psychologist Looks at the Teaching of Ethics', *The Hastings Center Report*, 12(1), p. 29. doi: 10.2307/3560621.
- 126. Rhodes, R. (1986) The Making of the Atomic Bomb. New York, NY, USA: Simon and Schuster.
- 127. Roberts, S. R. *et al.* (2022) 'Incorporating social media and muscular ideal internalization into the tripartite influence model of body image: Towards a modern understanding of adolescent girls' body dissatisfaction', *Body Image*, 41, pp. 239–247. doi: 10.1016/j.bodyim.2022.03.002.
- 128. Russell, A. M. et al. (2021) '#Alcohol: Portrayals of Alcohol in Top Videos on TikTok', *Journal of Studies on Alcohol and Drugs*, 82(5), pp. 615–622. doi: 10.15288/jsad.2021.82.615.
- 129. Sánchez-Fernández, R. and Jiménez-Castillo, D. (2021) 'How social media influencers affect behavioural intentions towards recommended brands: the role of emotional attachment and information value', *Journal of Marketing Management*, 37(11–12), pp. 1123–1147. doi: 10.1080/0267257X.2020.1866648.
- 130. Sanchez, S. (2022) 'The World's Oldest Profession Gets a Makeover: Sex Work, OnlyFans, and Celebrity Participation', *Women Leading Change: Case Studies on Women, Gender, and Feminism*, 6(1), pp. 4–17.
- 131. Schirch, L. (2021) Social Media Impacts on Conflict and Democracy: The Techtonic Shift. Routledge.
- 132. Sierra-Rodríguez, A., Arroyo-Machado, W. and Barroso-Hurtado, D. (2022) 'Twitter and human trafficking: Purposes, actors and topics in the Spanish-speaking scene', *Comunicar*, 30(71), pp. 79–91.
- 133. Singer, P. W. and Brooking, E. T. (2018) LikeWar: The weaponization of social media. Eamon Dolan Books.
- 134. Singh, K. (2020) 'Effect of COVID-19 on Violent Extremism and Terrorism in Digital Spaces', *Centre for Air Power Studies (CAPS) in Focus*.
- 135. Sinha-Roy, R. and Ball, M. (2021) 'Gay Dating Platforms, Crimes, and Harms in India: New Directions for Research and Theory', *Women & Criminal Justice*, pp. 1–17.
- 136. Sirola, A. *et al.* (2021) 'Online identities and social influence in social media gambling exposure: A four-country study on young people', *Telematics and Informatics*, 60, p. 101582. doi: 10.1016/j.tele.2021.101582.
- 137. Smahel, D. et al. (2020) EU Kids Online 2020: Survey results from 19 countries. doi: https://doi.org/10.21953/lse.47fdeqj01ofo.

- 138. Stoldt, R. *et al.* (2019) 'Professionalizing and Profiting: The Rise of Intermediaries in the Social Media Influencer Industry', *Social Media + Society*, 5(1), p. 205630511983258. doi: 10.1177/2056305119832587.
- 139. Sumter, S. R., Cingel, D. and Hollander, L. (2021) 'Navigating a muscular and sexualized Instagram feed: An experimental study examining how Instagram affects both heterosexual and nonheterosexual men's body image.', *Psychology of Popular Media*. doi: 10.1037/ppm0000355.
- 140. The alliance to better protect minors online, I. (2017) "A Safer Internet for Minors" Statement of Purpose Alliance to Better Protect Minors Online. Available at: https://digital-strategy.ec.europa.eu/en/policies/protect-minors-online.
- 141. The Brown University Child and Adolescent Behavior Letter, P. (2014) 'Social Media Use and Adolescents: A Guide for Parents', *The Brown University Child and Adolescent Behavior Letter*, 30(S3), pp. I–II. doi: 10.1002/cbl.20208.
- 142. Thelwall, M. and Cash, S. (2021) 'Bullying discussions in UK female influencers' YouTube comments', *British Journal of Guidance & Counselling*, 49(3), pp. 480–493.
- 143. Uhls, Y. T., Ellison, N. B. and Subrahmanyam, K. (2017) 'Benefits and Costs of Social Media in Adolescence', *Pediatrics*, 140(Supplement_2), pp. S67–S70. doi: 10.1542/peds.2016-1758E.
- 144. UNICEF (2019) *Growing Up in a Connected World Understanding Children's Risks and Opportunities in a Digital Age.* Florence. Available at: https://www.unicef-irc.org/growing-up-connected#sectionDownload.
- 145. UNICEF, O. (2012) *Ethical Principles, Dilemmas and Risks in Collecting Data on Violence against Children*. New York. Available at: https://data.unicef.org/resources/ethical-dilemmas-risks-collecting-data-violence-children-findings-work-cp-merg-technical-working-group-violence-children/.
- 146. Uzunoğlu, E. and Misci Kip, S. (2014) 'Brand communication through digital influencers: Leveraging blogger engagement', *International Journal of Information Management*, 34(5), pp. 592–602. doi: 10.1016/j.ijinfomgt.2014.04.007.
- 147. Valcke, M. *et al.* (2010) 'Internet parenting styles and the impact on Internet use of primary school children', *Computers & Education*, 55(2), pp. 454–464. doi: 10.1016/j.compedu.2010.02.009.
- 148. Van, E. A. K. *et al.* (2019) 'Urban Influencers: An Analysis of Urban Identity in YouTube Content of Local Social Media Influencers in a Super-Diverse City', *Frontiers in Psychology*, pp. 1–17.
- 149. VanderStoep, S. W. and Johnston, D. D. (2009) *Research methods for everyday life: blending qualitative and auantitative approaches.* 1st edn. San Francisco: Jossev-Bass.
- 150. Vasquez, E. (2020) 'The Cultivation of Materialism in the Fashion Community on Instagram'.
- 151. W.F. Lau, W. and H.K. Yuen, A. (2013) 'Adolescents' risky online behaviours: The influence of gender, religion, and parenting style', *Computers in Human Behavior*, 29(6), pp. 2690–2696. doi: https://doi.org/10.1016/j.chb.2013.07.005.
- 152. Wolf, K., Nalloor, J. and Archer, C. (2019) 'Influencers and brands behaving badly: How governments and organisations are reacting to and regulating for the cross-cultural challenges of working with social media influencers', in *In International Cross-Cultural Communication Conference*. Abu Dhabi. Available at: https://espace.curtin.edu.au/handle/20.500.11937/75215.
- 153. Ybarra, M. L. *et al.* (2009) 'Associations between blocking, monitoring, and filtering software on the home computer and youth-reported unwanted exposure to sexual material online', *Child Abuse & Neglect*, 33(12), pp. 857–869. doi: 10.1016/j.chiabu.2008.09.015.
- 154. Yoo, W., Yang, J. and Cho, E. (2016) 'How social media influence college students' smoking attitudes and intentions', *Computers in Human Behavior*, 64, pp. 173–182. doi: 10.1016/j.chb.2016.06.061.
- 155. YPULSE, W. (2021) *Social Media Behavior Report*. New York, NY, USA. Available at: https://www.ypulse.com/article/2021/02/22/gen-z-millennials-use-social-media-differently-heres-x-charts-that-show-how/.
- 156. Zaman, B. and Nouwen, M. (2016) *Parental controls: advice for parents, researchers and industry.* London, United Kingdom. Available at:

- http://eprints.lse.ac.uk/65388/1/_lse.ac.uk_storage_LIBRARY_Secondary_libfile_shared_repository_Conte nt_EU Kids Online_EU_Kids_Online_Parental controls short report_2016.pdf.
- 157. Zhou, S. *et al.* (2021) 'How social media influencers' narrative strategies benefit cultivating influencer marketing: Tackling issues of cultural barriers, commercialised content, and sponsorship disclosure', *Journal of Business Research*, 134(November 2019), pp. 122–142. doi: 10.1016/j.jbusres.2021.05.011.