Talking About Digital Responsibility: Children's and Young People's Voices

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Introduction

A review of the research on children and digital technology uncovers a field occupied with warnings of the possible risks and consequences for children (Lemmens et al., 2011; Livingstone et al., 2014; Odgers &

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H. Holmarsdottir et al. (eds.), *Understanding The Everyday Digital Lives of Children and Young People*, https://doi.org/10.1007/978-3-031-46929-9_13

Jensen, 2020; Smahel et al., 2012; Wang et al., 2015). Such concerns are related to both well-being and health (Goodyear et al., 2018; Mishna et al., 2010; OECD, 2018), and online safety and security (Dowdell & Bradley, 2010; Livingstone et al., 2015; Marsh et al., 2010; Strasburger et al., 2010). Livingstone and Smith (2014) suggest that not all digital risk results in actual harm and that there is a need to recognise protective or resilience factors that will reduce the vulnerability of children. This is one of the main aims of this chapter through our focus on the digitally responsible child.

The everyday lives of the so-called digital generation have been transformed by digital technologies. Children interact with digital technology, and there are constant concerns that they are not fully equipped to tackle the challenges faced by the increased saturation of digital technology despite that they form most Internet users today (Durkee et al., 2012). Such challenges can, for example, be excessive screen time, online bullying and harassment, and other issues related to their well-being.

With increased access to digital technology, children and young people can locate, organise and coordinate groups of like-minded youth with shared interests, thus contributing to collaboration and togetherness. This allows for unlimited learning opportunities, entertainment and connections with a wide audience. This may also give the impression that all young people are digital natives, well-connected and highly digitally competent, but does this expansive access overlook the importance of children being digitally responsible?

In this chapter, we choose to use the term *digital responsibility* as a part of children's and young people's digital competence (Gudmundsdottir et al., 2020). Digital responsibility is an important aspect of the EU digital competence framework, which includes 'information and data literacy, communication and collaboration, media literacy, digital content creation (including programming), safety (including digital wellbeing and competences related to cybersecurity), intellectual property related questions, problem solving and critical thinking' (Council of the European Union, 2018, Section 4). The framework also recognises that engagement with digital technologies and content requires 'a reflective and critical attitude' and 'an ethical, safe and responsible approach' to the use of digital tools. Being digitally responsible means having the online

social skills to take part in online life in an ethical, respectful way and understanding rules and regulations. Digital competence serves as the overarching term in our study, even though we acknowledge that various other concepts are in use (Hatlevik et al., 2015), whereas digital responsibility relates to ethical, attitudinal and legislative aspects of using digital technology or navigating online (see Table 1). Furthermore, we understand digital responsibility not only relating to online technologies but also including the social (physical) situatedness of digital technology that goes beyond being online. By doing so, we attempt to focus on the active responsible behaviour, attitudes and *voices* of children and young people as well as their actions and understanding.

The children and young people in our study come from three different countries (Estonia, Norway and Romania) and range between 10 and 16 years of age. We aim to raise the issue of how children and young people relate to digital responsibility through their own voices and pose the following research question:

How do children and young people talk about and understand digital responsibility?

The emphasis on developing awareness and becoming a digitally responsible person is important in young people's lives as digital responsibility includes themes such as online identity and trust; online interactions, including issues related to online bullying and harassment; the critical evaluation of online content (Flanagin & Metzger, 2008) and how to share content according to copyright rules (Livingstone et al.,

Table 1 Overview of concepts—conceptualising digital responsibility

Digital competence	Concept	Dimensions	Analytical indicators
	Digital responsibility	Legal aspects	• Copyright and plagiarism • Privacy and data protection
		Ethical aspects	• Responsibility for self and others • Moral agency • Sense of trust, friendship, goodwill
		Attitudinal aspects	• Online behaviour and identities • Online bullying • Critical source awareness

2011, 2015). Digital responsibility also includes rights and participation for the digital generation. Furthermore, the importance of addressing this concept can be seen through policymaker's view on the use of digital technologies to enable young people to navigate the complexity of permeating technologies (European Commission, 2016), and teachers and school authorities are increasingly adding digital responsibility to the agenda to prevent online risks and increase young people's resilience (European Commission, 2022). What has been researched to a lesser extent is how children and young people themselves experience their digital lives and how they understand and relate to digital responsibility.

Children's and Young People's Voices and the Country Context

The children and young people in this study come from three countries, Estonia, Norway and Romania, and we came in contact with the children through their schools. Each of the countries represents a different geographical area in Europe with slightly different educational systems, strategies for digitalisation and access to digital technology, including the Internet (Ayllón et al., 2023). Before exploring how children and young people in the three countries consider digital responsibility, it may be necessary to briefly introduce the characteristics of the education systems and curricula. We consider it necessary for the upcoming comparison of the different contexts to provide information on the differences between and similarities of the three countries with regard to how they address digitalisation in education.

The Context of Children in Estonia

Digitalisation has gained increased attention in Estonia. In the Lifelong Learning Strategy 2020, one of the strategic goals was a 'digital turn', including applying modern digital technology in learning and teaching more expediently and effectively. Currently, Estonia's Digital Agenda 2030 is in place. The curriculum in Estonia builds on competences that

are promoted in both basic school (Grades 1–9) and upper secondary schools (Grades 10–12). In the curricula, competence is defined as a set of knowledge, skills and attitudes that ensure the ability to act creatively, entrepreneurially, flexibly and effectively and is important in developing a person and a citizen. Digital competence is taught in both basic schools (divided into three stages of study: Grades 1–3, 4–6 and 7–9) and upper secondary schools and was added to the national curricula in 2014. While other competences in the curricula differ based on level (being more comprehensive in upper secondary school), digital competence is described at the same level both in basic and upper secondary school. Thus, the ability to use digital technology for finding, storing and creating content, communication and cooperation in digital environments as well as being aware of the risks and having the knowledge to protect one's privacy, personal data and digital identity are all part of digital competence in general education. In addition, this competence in the curricula follows the same moral and value principles on digital platforms as in everyday life. Schools in Estonia not only promote digital skills but rather view digital skills as a broader set of competences, combining digital skills with knowledge and attitudes.

The Context of Children in Norway

The latest digitalisation strategy for kindergartens and schools in Norway (2023–2030) aims to offer support to school authorities and teachers regarding privacy issues and the significance of teachers' professional digital competence. It recognises the importance of children's digital competence for their future education, social development, identity formation, and overall ability to participate and contribute to society. Digital skills have been defined as a basic skill in the Norwegian curricula (Norwegian Directorate for Education and Training [NDET], 2020) for both primary (Grades 1–7) and lower secondary (Grades 8–10) and upper secondary schools (Grades 11–13) since 2006. Digital skills in Norway include digital responsibility. This stipulates that children must be able to follow privacy rules online, show consideration (including positive attitudes), and behave ethically and responsibly online. The curriculum

highlights the use of online sources and the understanding of copyright regulations as a skill when creating and re-creating materials. As such, the curricula present various aspects of digital responsibility, where students are responsible users, not only ensuring their own safety but also that of others. This entails more than adhering to an instrumental and rigid list of dos and don'ts but rather encompasses attitudes and how students express their own identity online, how they deal with inappropriate behaviour and harassment, and cultivate a critical awareness of online information, and so forth.

The Context of Children in Romania

The new Strategy for the Digitalisation of Education (2021–2027) aims to digitalise much of the Romanian population in terms of developing digital competence. Some of the changes to be implemented starting in the fall of 2022 include obligatory courses on digital competence for primary school children (Grades 1–4) and revising the curricula of informatics/ICT classes in the first level of secondary schools and high levels (Grades 5–8 and 9–12/13). The curriculum, at both levels, should also include elements of eSafety. Digital competence in Romania follows the general guidance of the European Commission's (EC) definition as confidence in use, critical and responsible use of digital technologies, as well as their use for education, work, and participation in society (European Commission et al., 2022). The educational framework in Romania states elements related to cybersecurity: intellectual property rights, privacy online and general safety online. However, these elements are only included in the curricula for the middle school level. There is no formal provision of digital responsibility at the primary level, but the new strategy aims to introduce obligatory elements related to digital competence in primary school and revise and update the curricula for the middle school classes. According to the EU statistics on income and living conditions (EU-SILC) 2019, the digital disparity in Romania is still the highest in all of Europe, with three out of ten children living in digital deprivation (Ayllón et al., 2023).

In summary, all three countries incorporate elements of digital responsibility into their curricula, along with digitalisation strategies. However, there are variations among the countries in terms of access and the extent to which digital competence is emphasised in education.

Conceptual Framework

The PEAT conceptual model (Dicte, 2019) informs this study. PEAT describes four dimensions when developing digital competence—pedagogical, ethical, attitudinal and technical (PEAT)—and was originally developed as a part of an Erasmus project between four European countries and teams of teacher educators wanting to better understand the development of teachers' digital competence. The model has been used in several studies, such as in a cross-country comparison by Hathaway et al. (2023), Gudmundsdottir et al. (2020) and Milton et al. (2021) as well as when unpacking the concept of professional digital competence (McDonagh et al., 2021). In this study, we draw on two of the dimensions that are relevant for understanding children's and young people's digital responsibility, namely, the ethical and attitudinal dimensions. As our study focuses on children, the pedagogical dimension naturally is not applicable, while the technological dimension is not the focus of this study. Additionally, we expand the ethical dimension with a legal dimension as digital responsibility is closely connected with juridical aspects and various regulations regarding privacy, copyright, etc. While the legal and ethical can be viewed as closely linked, it is useful to separate them to highlight different aspects: While an action can be legally justified ('can'), it may be unethical ('should'). The ethical is related to values and moral issues, while the legal aspects are more tangible, are regulated by law and may have greater consequences.

Furthermore, the attitudinal, ethical and legal concepts are interrelated. For example, we chose to discuss 'digital bullying' as an attitudinal aspect, whereas it could also be defined as both an ethical and/or a legal aspect of digital responsibility depending on the situation. Being an attitudinal issue, we want to emphasise that unhealthy attitudes precede the bullying 'activity' itself. Such understanding is important in all preventive

work in schools. We use these three overall dimensions to unpack the concept of digital responsibility and explore the extent to which children and young people employ and discuss aspects around one or more of these three dimensions in relation to their education. In Table 1, we see the three-dimensional distinctions of digital responsibility, namely, the legal, ethical and attitudinal aspects.

Legal Dimension

The first dimension of responsible use is the legal aspect, as regulated through rules and regulations. For the digitally responsible child, online behaviour involves having an awareness of the legal rules underlying online actions and the consequences that violations of these rules might bring. Research on the legal dimension of acting responsibly online underscores copyright and privacy as two main areas of concern (Giæver et al., 2017; Munthe et al., 2022) and includes data protection. These issues (copyright, privacy and data protection) are somewhat intertwined. An example of this is the posting of images online. In terms of rules and regulations, posting an image of a person without the consent of the photographer and the person photographed would violate both the copyright of the photographer as well as the privacy of the person photographed and may have legal repercussions. Knowing how to protect your personal data is a step in ensuring that private matters remain private. However, for the sake of clarity, we will discuss copyright separately.

Copyright and Plagiarism

Copyright refers to an understanding of how 'copyright and licences apply to data, digital information and content' (European Commission et al., 2022, p. 31). Copyright, or intellectual property rights, refers to both the legal and moral rights given to the creator of content. The misappropriation of intellectual property is a breach of copyright, such as downloading music or videos which one has not paid for (Ma et al., 2007). Plagiarism, or the taking of someone else's work and presenting it

as one's own, is one example of violating an author's copyright. Nwosu and Chukwuere (2020) raise issues of what factors are behind students' plagiarism and what strategies can be used to reduce plagiarism. They conclude that a crucial element is students' understanding of the concept of plagiarism as well as diverging methods of plagiarism.

Several studies address children's and young people's awareness and knowledge of, or lack of, copyright rules online (Chen & Shen, 2018; Chu et al., 2020; Ma et al., 2007, 2008). A study by Maxwell et al. (2008) found that students' *attitudes* towards plagiarism indicate a lack of student awareness of different nuances of plagiarism. Ma et al. (2007) indicate that young people are developing a more lenient attitude towards cheating, especially considering the ease of access. Furthermore, their findings indicate that students' understanding of plagiarism was limited and that students plagiarise due to peer culture (p. 77). Ma et al.'s findings capture a core concern—that of illegal behaviour becoming more accepted. Against this background, it is therefore crucial to understand how children and young people understand copyright in terms of active responsible behaviour online.

Privacy and Data Protection

An abundance of personal data is gathered through various platforms in schools (Selwyn, 2016; Williamson, 2017). Personal data refers to information that can identify a person directly or indirectly, such as name, identification number and location data (European Union, 2016). Privacy, and being in control of one's data, is moreover defined as a basic human right for all, including children and young people (UN General Assembly, 1989).

Chen and Shen (2018) highlight the importance of guiding students to act responsibly online, where privacy and data protection are crucial elements. Stoilova et al. (2021) raise the issue of what children understand about privacy in the digital environment, whereas Selwyn and Pangrazio (2018) highlight the need to foster 'data agency' or the notion of empowering children and young people in self-managing personal data. Stoilova et al. (2021) identify the privacy paradox as the 'gap

between a claimed concern for privacy online and actual behaviour' (Stoilova et al., 2021, p. 569). Selwyn and Pangrazio's (Selwyn & Pangrazio, 2018) findings indicate that despite being aware of privacy and data protection issues and 'uncertainties regarding personal data' (p. 11), teenagers in their study (13–17-year-olds) were not always reflective of their actions.

The legal dimension is therefore knowing about and being able to apply rules and regulations to keep personal data private and thus protected. The legal dimension also means knowing about and being able to apply rules and regulations governing intellectual property rights (copyright), where the misuse of others' intellectual property, such as appropriating another's creation(s) (e.g. text) as one's own, can be labelled plagiarism. Thus, the legal dimension encompasses the rules and regulations of privacy, data protection and copyright (or intellectual property rights), as well as an understanding of the boundaries between the legal, ethical and attitudinal dimensions.

The Ethical Dimension

The need to recognise how children and young people can act safely and reflectively in the digital world requires the competence to think and talk about ethics and values, with some researchers pointing to the need to focus on virtue-based ethics or virtue ethics (Chang & Chou, 2015; Vallor, 2010). While children and young people may have the capacity to think morally and ethically, they still need to recognise situations as moral or ethical, such as those relating to justice, rights and consequences for others. Thus, personal responsibility for oneself and others goes beyond formal and legal responsibility and is linked to values and moral principles or moral agency (Bandura, 2002). According to Bebeau et al. (1999), 'moral sensitivity', or understanding how our own actions affect others, is as important as the capacity to reason and make judgments. Yet, Colby and Damon (1992) suggest that even when children and young people may possess a moral awareness, they may not always act morally; that is moral thinking does not coincide with moral conduct. Understanding and acting in moral and ethical ways in the everyday use of digital

technology requires making choices that constitute both opportunities and challenges faced by children and young people.

Issues related to justice, rights and consequences to others mean that the ethical dimension spills over to the legal dimension as this concerns situations related to risks, such as those linked to privacy and data protection. For instance, the use or misuse of personal data has been widely addressed in the research literature (Ahn, 2011; Freitas et al., 2017; Lehavot et al., 2012; Soraghan et al., 2015; Williamson, 2017). Many of these studies are particularly related to individual well-being, either a real or perceived sense of feeling stigmatised when one's privacy is infringed upon (Mittelstadt, 2017). While children and young people might show concern about their online privacy, this may not always be displayed in their behaviour (Boyd & Hargittai, 2010). It may not lead to a sense of trust, friendship or goodwill when behaviour differs from the understanding of digital responsibility.

We recognise that children and young people are quickly becoming the largest user groups of this technology, and yet they are often not fully aware of how to protect themselves and their personal information and are often seen as vulnerable. Moreover, children and young people often do not make decisions about what devices, applications or platforms are used either at home or at school. The result is that parents and/or schools are mediating the access to and use of technology and therefore need to provide sufficient guidance in terms of the ethical dimension (Livingstone & Byrne, 2018).

For Ess (2015, 2016), a key element in ethical reflections regarding digital technology is our assumptions as human beings and *moral agents*, including our *responsibilities* not only to ourselves but also to others. Thus, children and young people also have *ethical agency*.

Our primary ethical theories and approaches rested on the assumption that human identity is primarily singular and *individual*: and thereby, moral *agency* and *responsibility* were tied directly—and, most often, exclusively—to single individuals. But for several decades now, our conceptions of human selfhood and identity have begun to shift towards various *relational* conceptions—conceptions that stress a sense of identity as inextricably interwoven with various relationships (familial, social, natural and so on) that define us as *relational* selves (Ess, 2015, pp. 48–49).

For the digitally responsible child, this means that ethical agency is shared and distributed among a network of relationships, requiring ethical responsibilities and a sense of trust (O'Neill, 2012). 'Trust is important in personal relationships, for the individual's good as well as for building self-trust' (Turculeț, 2014, p. 970). Trust is understood as the readiness to be vulnerable to others and relying on the goodwill of others in the interaction, not doing harm and showing respect in accordance with shared norms and values (Bormann et al., 2021, p. 122). While the use of digital technology is structured and mediated first and foremost by parents, schools and peer cultures as well as the wider society, these same arenas and actors can also mediate how children and young people develop relationships, many of which now take place also online. For O'Neill (2012) this means that

> the contextual knowledge … contributing to judgements about trustworthiness are filtered through different relationships, the most important of which are those that exist between parents and children, and between children and their peers, teachers and other influential socializing agencies. In each instance, knowledge, experience and trust are important factors in determining the outcomes involved. (p. 553)

The data below (the 'voices') from children and young people display continuous negotiations between many of the ethical issues we have discussed. More importantly, the routine social practices that give meaning to their lives, and simultaneously the broader perspective about 'good' behaviour influencing their activities, are shaped by societal expectations, requirements, norms and power imbalances (Bauwens & Mostmans, 2020). Through their experiences, children and young people are developing expectations towards each other in terms of norms and values within the digital ecosystems in which they interact. For the digitally responsible child, developing and having trust is a crucial moral and ethical part of digital responsibility.

Attitudinal Dimension

The digitally responsible child also includes an attitudinal dimension, which has to do with being social online and a responsible online citizen. Martzoukou et al. (2020, p. 1414) agree that digital competence involves 'not only technology mastery, i.e. the abilities, competencies, capabilities and skills required for using digital technology, media and tools, but also a digital mindset, which consists of attitudes and behaviours necessary to develop as a critical, reflective and lifelong twenty-first-century learner'. Reviewing the literature, McGarr and McDonagh (2019) claim that an attitudinal dimension rarely appears as a part of the digital competence frameworks. For Bawden (2001), addressing questions of understanding, meaning and context is also crucial. There is a need to focus both on technical mastery and simultaneously on a 'digital mindset within context' (Martzoukou et al., 2020, p. 1414), such as how children and young people interact socially online and which attitudes they express. Furthermore, Gazi (2016) sees the attitudinal dimension as revolving around the idea of digital citizenship as 'a socially constructed set of practices and the norms of behaviours' which also 'facilitates individual development and protects social values in digital society' (p. 139). Still, the term digital citizenship is used in different ways across disciplines as Chen et al. (2021) present in their study on conceptualising and measuring digital citizenship which adds further complexity to this field.

Online Behaviour and Identities

Children and young people explore and reflect on questions about their values and ideals online. These can be related to who they want to become, whom they follow on social media and who they view as role models. In short, children are greatly influenced by others' perceptions and preconceptions in their online behaviour (Mascheroni et al., 2015; Pandit, 2015). They interact through online communication with various apps, using online gaming or social media platforms. Doing so, children and young people exploit the opportunities to both stay in touch with friends and family as well as to communicate on school (home)work. As a part of

their online exploration, children and young people often experiment with different identities. They push boundaries in search of who they want to become or who they seek to be. Different alternatives and paths sometimes become quite extreme (Lehdonvirta & Räsänen, 2011; Mascheroni et al., 2015). Consequently, there is widespread concern regarding the influence of digital technologies on children's emotional well-being. Hoge et al. (2017) further emphasise the need for additional research to explore how education and increased discourse on the distinction between online and real-life identities among young individuals can mitigate the negative effects of online peer pressure.

While we recognise that social media affects how children and young people interact, attitudes play an important role in what they share and how they conduct their online behaviour. This echoes what Boyd (2010) wrote as early as 2010 when she claimed that social media changes the way children and young people exercise their online identities. She also emphasises the importance of being conscious of the unknown online audience and the online replicability which causes children to selectively choose how they represent themselves online. While digital platforms, online technology and in particular social media change the way children and young people interact, it is the attitudes that primarily influence how children and young people express their identity/ies and behave online.

Online Bullying

The most severe online behaviour that children and young people experience has to do with online bullying and harassment (Gudmundsdottir et al., 2020; Livingstone et al., 2011, 2015; Choi, 2016; Mason et al., 2014; Metzger & Flanagin, 2013). Bullying is strongly related to well-being and mental health, and the consequences of bullying are grim for those involved (Mark et al., 2019). Bullying has been defined as 'long-standing violence, physical or psychological, conducted by an individual or a group directed against an individual who is not able to defend himself in the actual situation' (Roland, 1989, p. 21), and Olweus (1990, 1993) describes it as aggressive repeated behaviour that is both intentional and involves an imbalance between the victim and the one(s)

carrying out the bullying. Online bullying is conducted through digital platforms or digital technologies. In recent research, Lund et al. (2017) advocate for a slightly different view of bullying and rather understand bullying as a set of complex social processes. Thus, the bullying of children and young people includes actions by adults or children that prevent the experience of belonging, being important and having the opportunity to participate.

Whereas online bullying certainly relates to both legal and ethical aspects, we have categorised it within the attitudinal dimension to underscore the significance of attitudes as a crucial preventive measure against online bullying (Park et al., 2021). When dealing with online bullying, we see that it: (a) always involves attitudes towards other people and their online identities, (b) involves more than one person, and (c) and is part of complex social processes (Lund et al., 2017). Knowledge about online bullying is important to detect and avoid risks and instances of harassment as being the victim of online bullying profoundly affects the psychological well-being of children and young people, leading to forms of depression and anxiety (Hoge et al., 2017; Kreski et al., 2022). School children reporting online bullying are more likely to report depression, anxiety and self-harm, according to Kowalski and Limber (2013), even though they rarely report these incidents to adults (Daneback et al., 2018). Hence, online bullying stands as the most devastating form of bullying impacting the mental health and overall well-being of young people (Mark et al., 2019). Online bullying thrives on inappropriate and often dangerous attitudes, entailing severe negative behaviours that detrimentally affect the well-being of children and young people.

Critical Source Awareness

Another aspect of the attitudinal dimension relates to critical source awareness. Children and young people are surrounded by online information, making critical source awareness an important part of being digitally competent. Pérez-Escoda et al. (2021) point out the difficulties students have in comprehending different types of documents and they particularly point to the need of critical thinking skills in order to raise

critical source awareness. Children's and young people's critical source awareness is not spontaneous (Braasch et al., 2013); meaning it is not a skill that occurs naturally or automatically but rather something that must be acquired through learning and education. Whereas most children and young people use the Internet as a source of information, both at school and at home, they have difficulties comprehending online information and separating real news from false or misleading online information (Breakstone et al., 2019; McGrew et al., 2018). For example, they do not ask the 'correct' questions or question the authority of the text, that is making a distinction between advertisement and online information (Frønes et al., 2011). Children and young people also need to acquire the skills to cultivate awareness regarding the credibility and quality of online information, as well as the ability to discern and identify instances of fake news.

In the following section, we will introduce the methodological approach when exploring digital responsibility in each of the three countries and how the voices of children and young people were captured.

Method

The data reported in this chapter includes a design in which the same students were interviewed at two different intervals, first in the spring and again in the following autumn. The two interviews marked a shift for the participants from one education phase to another (from primary to secondary school or lower secondary to upper secondary school). For instance, in Norway, this meant that children normally aged 12 were interviewed when they were still in primary school (Grade 7) and then again, usually at age 13, when they had entered lower secondary school (Grade 8). In each country, the age of the children differed slightly, as the intention was to focus on a natural transition phase in education in each country. This explains and provides insights into the different age ranges of the participants and how they view digital responsibility. The data collection followed a qualitative research approach that involved interviewing a minimum of six children in each of the participating countries. The selection rationale and ethical considerations of the sample are presented below.

The data in all three countries were collected between May 2021 and January 2022. While each team had planned face-to-face interviews, only the first set of interviews in Romania were conducted face-to-face. The rest of the interviews, both round two in Romania and rounds one and two in Estonia and Norway, were conducted via Zoom. We were initially concerned that conducting interviews via Zoom would create challenges for some of the participants to speak freely as our previous experience is that it can be slightly inhibiting for them to talk with strangers (the researchers), not having met them before. We were, however, pleasantly surprised by the ease of using Zoom for the interviews, which also made recording the interviews easy. Using Zoom was also easier in terms of time consumption, not only regarding the time it would have taken to travel to the different schools or homes of the children but also in finding a time that suited everyone. It was also easier given that the participants could be interviewed in a place of their choosing, such as their home. This flexibility was appreciated and resulted in the participants being relaxed and interested in participating in the study. What we missed out on was the possibility of getting an accurate impression of the school districts, but instead, we may have gained valuable insights into the domestic environments and personal lives of many of the children.

To participate in the study, written consent from parents or caregivers was collected, and the participants themselves also provided their consent either in written or verbal form. This way, we made sure that both the parent and the child/young person had agreed to participate and had all the information needed to give their consent.

In all three countries, the interviews were transcribed and translated from the local language to English, and all transcription files were de-identified, as agreed in the data protocol for the DigiGen project, making it easier to work with the data outside of the secure server where the data are stored. The analysis of the Estonian data was conducted by one researcher (author #4), and the results were validated in discussions with the other researcher (author #6). As a result of the discussion, a few of the analysed texts were moved among the coding categories. The Norwegian team members worked with the data both individually and during group analysis sessions (authors #1, #2 and #3), and the Romanian data were analysed primarily by the Romanian researcher (author #5).

Table 2 Overview of the data

	Estonia Aged 15–16	Pseudonyms Estonia	Norway Aged 12–13	Pseudonyms Norway	Romania Aged 11–12	Pseudonyms Romania
Interview 1 Spring 2021	6 3 girls, 3 boys	Girls: Laura, Liis, Kelly Boys: Mark, Rasmus, Oliver	11 3 girls, 8 boys	Girls: Emma, Lea, Hedda Boys: Jakob, Magnus, Noah, Tobias, Lukas, Axel, Henrik, Elias	6 4 girls, 2 boys	Girls: Lidia, Isabela, Ioana, Marina Boys: Matei, George
Interview 2 Autumn 2021	6 3 girls, 3 boys		11 3 girls, 8 boys		6 4 girls, 2 boys	
Total interviews	12		22		12	

The participant distribution among the three countries can be observed in Table 2. The number of Norwegian participants surpasses that of Romanian and Estonian children due to a higher level of initial interest to participate. Consequently, the findings presented are somewhat skewed, with Norwegian children receiving greater emphasis and representation in this chapter.

The analysis for this chapter was conducted in two stages following a thematic analysis approach (Braun & Clarke, 2012). Both stages involved 'identify, analysing and reporting on patterns (themes) within the data' (Braun & Clarke, 2006, p. 79). The initial analysis (the first stage) was conducted using a joint category coding system, which was used for all the countries participating in this part of the overall project (see Eickelmann et al., 2022). It was developed deductively in collaboration with all participating country teams, but inductive categories could also be generated during the initial analysis in each of the countries. In the second stage, each of the three country teams (Estonia, Norway and Romania) searched for theoretical connections and emerging themes relating to digital responsibility that, according to Braun and Clarke (2006), entails focusing on 'a more detailed analysis of some aspect of the data' (p. 84), which is described in more detail in the sections below. This ongoing analysis allowed us to further refine the specifics of each theme from the first stage, serving to develop the overall analysis for this chapter (Braun & Clarke, 2012). Using this approach proved useful in searching for and identifying common threads that extended across the entire set of interviews for the three countries. Below, we provide details on the sampling of the three countries.

Estonia

In Estonia, compulsory education ends in Grade 9, and those graduating can choose whether to continue with their studies to secondary education (Grades 10–12); continue studying in a vocational school, which also allows acquiring a profession; or if desired, one might enter the job market as neither upper secondary nor vocational education is compulsory in Estonia. That educational tracks can vary, at least from the end of Grade 9, was taken into consideration when recruiting. Participants were recruited using two strategies: (1) Teachers from different types of schools (rural/urban, large/small, etc.) were contacted with the request to share information about the project with the parents of their students. Further, teachers provided the researcher with parental contact information, or the parents contacted the researcher directly. (2) Purposive sampling was used to ensure diversity among the participants, such as by involving students from both large city schools and smaller communities with rural schools. Together, six students—three male and three female students—participated in the study, all aged 15 and 16. Compared to Norway and Romania, the Estonian sample consisted of the oldest young people in the study.

Norway

The initial data collection was planned to take place in May 2020, but due to the COVID-19 pandemic, the data collection was delayed until May 2021 and was completed in November 2021. In Norway, the three researchers (authors #1, #2 and #3) initially wanted to recruit participants directly through schools across the country. However, this proved difficult due to continuing COVID restrictions, making visiting schools to recruit directly more difficult. In the end, we made use of partnership schools linked to Oslo Metropolitan University (OsloMet), where student teachers do their teacher training during their studies. Also, we used our own research networks and social media accounts to recruit children for the interviews. We sent an information email to 151 partnership schools along with an additional 35 schools all in the Eastern region of

Norway. The email was aimed at recruiting children in Grade 7 who could also be interviewed in Grade 8. We also used social media aimed at certain groups that we thought could help us in recruiting the participants. When consent forms had been collected, we ended up with 11 children aged 12–13 who were interviewed twice, once in May 2021 and again in October–November 2021.

Romania

In Romania, data collection was delayed due to the COVID-19 pandemic. In the end, the first round of data collection took place at the beginning of June 2021 and the second round in October–November of the same year. The aim was to recruit children who were going from Grade 4 to Grade 5, meaning most of them were 11 years old when first interviewed and 12 at the time of the second round of data collection. The sampling was done using the professional networks of the Romanian DigiGen researchers, who sent out invitation emails to 20 contacts (teachers) in their networks. In the end, two schools were selected, with attention given to the heterogeneity of the sample in terms of the children's gender, socioeconomic background, geographical location and the size of the locality. There were no children with migrant backgrounds, but one girl belonging to the Roma ethnic minority was included in the sample.

Limitations

One limitation of this study can be linked to the comparison of the three cases from Estonia, Norway and Romania due to differences in the education system and levels of emphasis on digital responsibility in the national curricula as well as the different age groups of the participants. Yet, we see the value of exploring the ways different dimensions of digital responsibility appear through the voices of children and young people. Also, while we thought that conducting interviews via Zoom was a limitation, it turned out to be a positive aspect, not only due to how easy it

was to record the sessions, but we also got to interview the children and young people in their natural environments, and it saved time and funds not having to travel to every child. A part of the challenge of researching digital responsibility is also that the three dimensions (ethical, legal and attitudinal) are interrelated and some might say overlapping. We have sought to justify our categorisation but recognise that this can be seen as arbitrary. As for the term *digital responsibility*, it is one of several concepts already in use for ethical, legal and (to a lesser extent) attitudinal aspects related to being active online. By selecting the term 'responsibility', we intend to underscore the significance of every person's responsible behaviour, not only in terms of their actions but also in relation to their online communication with others.

Digital Responsibility: Children's and Young People's Voices

Whether a certain aspect of digital technology use in education and the lives of children and young people represents a challenge or an opportunity is influenced by where an individual is in their lifespan and the level of support they receive from the ecosystems surrounding them. For instance, children and young people use digital technology for various purposes and reasons, including gaming and social networking as well as in education, both in classrooms and for doing homework. As children and young people get older, the use of digital technology increases, which necessitates the need for understanding issues around privacy and autonomy, including legal, attitudinal and ethical aspects of their use. According to the Organisation for Economic Co-operation and Development (OECD), education systems are recognising the need to support children and young people in becoming digitally responsible citizens (Burns & Gottschalk, 2019). Yet, the extent to which this is taking place in schools is closely linked to the aim of this chapter, where we focus attention on how young people talk about and understand several aspects related to digital responsibility.

Legal Dimension

The curricula in Norway (NDET, 2020), Estonia (Estonian National Curriculum of Basic School, 2011; Estonian National Curriculum of the Upper Secondary School, 2011) and Romania (Romanian Ministry of Education, 2023) have different types of provisions for digital responsibility. In Estonia, the curricula include a horizontal, across-subjects focus on knowing how to protect one's privacy and personal data, similar to the Norwegian curriculum. In addition, the Norwegian curriculum (NDET, 2020) has an added focus on respecting the online intellectual property of others (copyright), while the Romanian curriculum highlight elements of cyber security. In the legal dimension, we asked whether children had learned about copyright, privacy and data protection. Our findings indicate that students appear to show an awareness of the legal dimension, such as the importance of protecting one's own privacy, but were less knowledgeable on issues of copyright. The picture in Romania appears to be somewhat different as there is limited access to digital technology and devices for children at school, as opposed to Norway and Estonia, where limited access is not an issue (Ayllón et al., 2023).

Privacy and Data Protection

An important dimension of acting responsibly online is privacy and protecting your personal data (Chen & Shen, 2018). When asked whether the children and young people had learned at school about privacy and data protection, several of the participants from Norway and Estonia referred to the importance of good passwords as part of data protection:

> Yes, we are still talking, we have even had lectures about this online security. […] that you change your passwords twice a year, if not more. And then it must contain some capital letters, numbers, I don't know, whatever else, well I don't know, all kinds of letters and stuff. (Liis, Estonia)

Our participants recognise strong passwords as those including a combination of numbers, letters and special characters. Furthermore,

protecting one's password and not giving information to strangers, something many adults know about even from their own childhood, is something children and young people see as important. In Norway, some of the participants reported that the topic of not sharing passwords and personal information was taken up in school or within peer groups: 'It is really mostly about not sharing your password with anyone or somehow not sending personal information unless you know who it is' (Elias, Norway).

However, while several of the children and young people reported that they knew what constituted good passwords, others reported having 'the same password for pretty much everything' (Henrik, Norway) and only changing the password if 'someone knows about my password' (Henrik, Norway). Some of the participants reflected on what constitutes a good or bad password:

> We get passwords given to us by the school in first grade, and many people still have the same password. So, I know that there are quite a few who have 'Sun12345'… Very good password. Very secure, haha. (Noah, Norway)

This example demonstrates how schools undermine the importance of making good passwords and how the students are aware of that. For many of the children and young people we spoke to in Norway, creating good passwords is not something that schools are necessarily focusing on as part of digital responsibility (Noah, Magnus and Axel, Norway). While schools may not be focusing on this, other social settings (microsystems) surrounding children and young people can contribute: 'we haven't talked about creating or how to create good passwords … but I've been told how to make good passwords by my dad' (Noah, Norway). Another respondent from Norway also points to the role of the home when he explains learning about 'cookies and if one has parents who are concerned about this' (Axel, Norway). These examples point to an important link between the two microsystems (home and school) in contributing to the development of digital responsibility.

While passwords were an important theme for participants from both Estonia and Norway, the data from Romania shows that most children report having discussions about data protection at school, usually

conducted by the school principal or by the form teacher. These discussions appeared to focus on stolen money, hacked accounts, viruses and not sharing passwords or sensitive data with strangers. The focus of the data from Romania is more on warning of the risks of using the Internet and the possible consequences that this may have. For instance, one participant pointed out that

> [we talk] about viruses, they can take our accounts or get us into accounts. And, for example, there are hackers, or I don't know their name, what, for example, they can access accounts, take money … [and the student elaborates further on talking with the teacher about this]. As far as I can remember, yes. For example, if we go into some ad sites, we can have viruses on our phone, or we can go into some apps that can take our accounts, or money can be taken from our parents' phones. (Matei, Romania)

Furthermore, another Romanian participant shared that they were told that they 'were not supposed to give data to strangers' (Marina, Romania). This was discussed when they were prohibited from using their phone during class. Some of the children and young people in Romania mentioned that they had special classes where police officers came to class to talk about privacy risks. Most of these discussions covered issues around privacy and data protection but little to no discussion about personal responsibility or personal behaviour online. Although the children were quite young, the interviews suggest that these lectures were rather focused on cautionary tales and scaring children and young people into not doing things that might be harmful to them, not on developing agentic responsible online behaviour.

> **Interviewer**: Mhh … and have you told your teachers about the potential risks or problems with digital technologies?
>
> **Ioana**: In the fifth grade no, but in the fourth grade they notified us, and I found it very interesting because two ladies from the police came and talked to us about the risks and problems (Romania).

What might be clear from the Romanian data as opposed to the data from Estonia and Norway is that there is more of a risk-oriented

discussion of what constitutes digital responsibility, highlighting a culture of fear rather than proactive actions or the agency of children and young people. As such, the focus appears to be not on acting responsibly but rather on avoiding use altogether.

A dimension of acting responsibly online is knowing the regulations governing posting an image online. The Norwegian and Estonian children and young people in our study report an awareness of the rules about posting pictures of others online. For instance, one participant does not post images of others online and explains that 'we've learned it a little bit in school, but that's pretty self-explanatory' (Tobias, Norway). This highlights not only a restrictive attitude towards posting images online but also that what they learn at school is the basics and is viewed as 'self-explanatory'. In Estonia, it seems that children and young people had limited discussions about online privacy at school. The children's and young people's understanding of this was that this was because 'no one really cares' (Mark, Estonia).

However, we should be concerned about the discrepancy both within and between the three countries in how much children and young people know or learn about privacy and data protection, with some having good knowledge and others being left to figure it out perhaps on their own. Thus, the diversity of knowledge that children and young people have may depend on what happens in school or what their parents are interested in or have competence in. What is clear is the need to ensure that all children and young people are aware of and can actively protect their privacy and their personal data.

Copyright and Plagiarism

Copying and using images posted online might be easy to do but is not always legal. How aware are children and young people of the legal aspect of making use of online images that are copyrighted? The Norwegian participants had heard the word but did not necessarily understand the concept: 'I've heard it before, but I can't tell you what it means' (Tobias, Norway). Moreover, they also do not know what they need to consider. When Elias from Norway was asked whether he knows what is important

to consider when using pictures from the Internet in school assignments, he simply answered: 'No, not really'.

Regarding images, the Norwegian participants report that while they do not know what copyright is, they have 'learned sort of if we're going to make, not like posting things on TikTok and stuff like that, but if we're going to make presentations and stuff like that. We must always check somehow if the photo we take is allowed to be used' (Hedda, Norway), indicating an awareness that there are rules governing the reuse of online images.

Despite being aware that not all images from the Internet can be used at will, children and young people do not seem to know that there are different types of images that they can use legally. In asking the participants about creative commons, one commented, 'I have heard the word before, but I don't really know what it means' (Henrik, Norway). Again, we see that the words sound familiar, but the understanding is lacking.

Still, some of the Estonian participants appear to understand what copyright refers to:

> **Laura**: That's it, you can't steal their work, someone else's work. Because this work is copyrighted.
>
> **Kelly**: Well, for me it means that you can't use someone's creation without asking their permission.
>
> **Oliver**: Yes, it does. Copyright is someone's property on the Internet, could be said. […] In particular, I have never copied anything from another person's property on the Internet.

Our findings indicate that while some of the children and young people were aware of what copyright means, there were also different attitudes to adhering to copyright rules depending on the type of intellectual property. For instance, one Norwegian boy who studies music in his spare time shared the following:

> Because we work with that in music, you can't take other people's music and post it. You have to use your own. We're working on that. But like … if you take a picture from the Internet and send it to someone, or use it in a PowerPoint or Word doc, then it's not something like I don't think much

about if it is okay to use the image or not, then I use the image. (Axel, Norway)

Interestingly, this participant seems to have a line drawn between not taking other people's music without permission, but this does not seem to apply to images from the Internet. The relaxed attitudes towards the use of images from the Internet are shared by other Norwegian participants when asked about school assignments and the use of pictures:

Tobias: Eh, if we use pictures, then we just go on Google and just look up and take that picture. […]

Interviewer: Do you know which pictures are copyright protected and which ones aren't, for example?

Tobias: No, but we don't have anything like that, we share it, or use it.

In our data from Romania, copyright issues appear to focus more on plagiarism as teachers are more concerned with copying or stealing information from others, but what the participants tell us is that this is taught in an uncritical and rather authoritative way. Children do not have conversations about the ethical implications of copyright infringement; they are simply forbidden to use devices and not given further explanations or options to engage with the topic of ethical work, copyright, fair use or plagiarism. Yet, the lack of discussion about copyright issues is something that also appears to be missing in the Norwegian context.

Ethical Dimension

Based on the ethical dimension in our framework, we highlight how children and young people talk about issues related to ethics as a part of digital responsibility. In the ethical dimension, our aim is on doing the right thing, more specifically, ethical agency including issues of trust—friendship and goodwill—and a sense of responsibility for oneself and others—a moral agency and responsibility.

Enabling friendship requires the building of trust and, more specifically, interpersonal trust. In the narratives below, we show how children

and young people in Norway and Estonia talk about trust in relationships, about friendship and goodwill as part of the ethical dimensions of digital responsibility. For instance, one of the Norwegian participants explains when taking pictures and posting of friends, he states, 'I always show them the pictures and ask if it is okay to post it, and I cannot recall having discussed this topic with the teacher in class' (Elias, Norway). It seems that the knowledge of posting without permission comes from somewhere other than classroom lessons or school. For instance, according to one of the Norwegian children 'it's fairly self-explanatory' (Lukas, Norway; see also Tobias, Norway in the section on protecting others' privacy online), referring to only posting with permission. Yet, others suggest that this is a topic discussed between peers.

> **Henrik**: I always tend to ask them, at least first, if I can post it or yes. And so do they, always, if they've taken a picture of me then if they can post it …. we talk quite a bit during the student period [a period in class when students can take up issues that are important to them] in school, that we always have to ask before sharing and what is allowed and not allowed with sharing photos and such (Norway).

It seems that ethical issues related to trust and friendship when using and posting photos are clearer and straightforward. However, when it comes to the use of images found online and using them in, such as in-class presentations, ethical lines related to trust in using or sharing them seem to get blurred: 'Yes, we usually say that the images we use … that everyone is allowed to use them and such, but … we really just search for it, and if there's a good picture, then we'll use it, but. I'm a little unsure' (Henrik, Norway). Perhaps the challenge with online images is that there is not a personal relationship and as such trust is not expected to the same degree as it is with knowing someone and the trust you have in terms of friendship.

Other aspects around the use of or posting images include considerations of 'what the video is about, and then ask the others if they think it's okay' (Tobias, Norway). Asking others for their opinion can be related to trust, especially since children are generally dependent on others for information.

The importance of the social relationship and the dynamics of trust that are crucial for establishing a trusting relationship over time is specifically exemplified by one of the Norwegian children when elaborating on not getting permission to post images of friends:

> **Noah**: Because it's … it's not allowed … And then there's, regardless of whether it had been allowed then. So it would have been a very, very bad, a very bad, very badly done to do that. When someone doesn't want you to. If there is anything. If there's something someone doesn't want you to post, then you shouldn't post it!

For this child, trust relies on a repeated action that is critical for not only developing trust but also for maintaining that trust over time. The repercussions of breaking that trust and the consequences it might have for others and the relationship or interpersonal trust are clear. The importance of being able to trust each other and not being unfair to each other shows a clear moral and ethical concern.

The data from Estonia involve a somewhat older age group, and while issues of trust are evident, the lines between trust and distrust are more blurred. For instance, one of the young people interviewed in Estonia demonstrates this blurred line as the example does not necessarily show fear or worry but more the navigational complexity and ethical issues related to trust that are part of the everyday lives of children and young people.

> **Mark**: You have to have their permission and stuff. But I don't know, it doesn't really apply to us. If there's some really crappy picture, then you still say, but actually, it doesn't really matter, that we use [it]. The majority of my friends use an app like Snapchat, and it's just a random selfie of a friend and then you send it to everyone who's there. […] It's not a thing anymore, to be kind of like, well, offended or well if you post a picture of someone, like on Instagram. If you send it to others then nothing really happens in general, that's like a friendly thing. If you do take a photo of someone like a completely unknown person again, then it's a different story. So that you can make sure. Actually, it still is that if it's like a really crappy picture, you'll understand it yourself, but also I've noticed lately, that you still ask, for example, the other day, a friend in the gym asked *hey, can I still send it*, I said *ah, no, I don't care* (Estonia).

It appears that this young person does not necessarily consider the actions of posting or sharing a photo of friends as a breach of trust or a sign of distrust. Yet, the line between trust and distrust becomes more blurred when referring to some unknown person, which, according to this young person, 'is a different story'. The implicit meaning of the relationship between friends suggests confidence in the friendship and describes moral agency, which means that there is trust and goodwill towards one another.

For the young people in Estonia, a close group of friends appears to suggest the existence of the interpersonal trust and that 'I should ask them, that's the main thing' (Kelly, Estonia). Continuing:

> **Kelly**: Well, with some, I haven't asked, but it's also that if I have, I once posted a video, I remember a friend and she said she didn't like it, so I took it down right away. It just embarrassed her a little, but I haven't put it on my main account either, I have a private account with only about six people, I've put there, well, videos of [female] friends.

In Romania the trust issue is mainly related to not trusting strangers online, as one participant explains: 'To not give our personal data to strangers, not say our age and not say where we live' (Marina, Romania). Romanian children were also given the advice not to steal from their parent's credit cards to purchase apps or online games. For instance, one participant points out: 'Yes, and how not to walk on [misuse] parents' phones in the sense of bank cards, email passwords, or other passwords, not to give phone numbers or information to strangers on different applications' (Ioana, Romania). What appears to be crucial here is the trust or lack thereof in terms of strangers and the trust one should have in terms of closer relationships, such as those with parents and other family members. This can also be linked to moral agency and the responsibility one has to others for the decision made and actions taken.

Moral Agency and Responsibility

The moral agency emphasises an individual's ability to be responsible for their decisions and actions regardless of whether those actions are

evaluated as morally good or bad. Here, we try to uncover children's and young people's lived experiences and how they construe moral agency in digital ecosystems.

Some of the participants do share with us that they consider their actions. 'If I'm to be completely honest, I actually think I rarely post things. Think maybe it's once a year or something. But I think about [my actions] very often, yes' (Elias, Norway). Moral agency means being responsible towards others and for one's own actions, but it can also mean how to act to avoid harm to others.

> **Henrik**: I have not experienced anything, but I have heard about others who are on Instagram that have had their account hacked into and who had had messages sent out and then they have to click on a link, and then they get hacked and a lot of things like that. However, this has not happened to me. They posted on, or they told everyone not to click on that link and such because then you could get a virus and such … Basically, they put out a message telling everyone not to click on any links sent by them because they contained a virus (Norway).

What we see, however, is that even though the children and young people show concern, it is not always displayed in their behaviour, such as on birthdays, for example.

> **Liis**: Well, like everyone does, he still agrees with me uploading, but like on birthdays no one asks that, look everything goes up [uploaded] on birthdays. That's like once a year when they're like, okay, well, that they have to, they have no escape from the fact, that they know it's coming, that they've already taken it into account. That, but like other times I do ask if it's ok if I put this video, that you're there, look, then I like to ask (Estonia).

In this quote, the participant shows some ethical concern but at the same time a willingness to share certain information online that seems to be agreed upon or an accepted norm being very context specific. Sharing has less to do with the type of information shared and instead, a desire to control the information and maybe who has access to it, like a group of friends at a birthday party or something that is just shared with friends directly.

Ultimately how children feel about their own and other people's privacy is a part of their larger development as a moral self. For these children, implicit rules guide their behaviour, and breaking these rules can have significant consequences within peer groups but perhaps less direct or clearer consequences regarding strangers.

Attitudinal Dimension

There are attitudinal dimensions connected to students' online behaviour and their views on being critical, reflective, social and responsible online citizens. Students' attitudes influence how students view online content and behaviour, how they use digital technology and how they collaborate and communicate online. When looking at how the attitudinal dimension appears in the children's and young people's answers in Estonia, Norway and Romania, we consider their 'digital mindset' (Martzoukou et al., 2020) and how the children and young people articulate themselves regarding what their beliefs are about various topics. We also report on how they consider their *attitudes* and *behaviour* as necessary to develop as critical and reflective learners as well as how they reflect on their own and their peers' online behaviour in general. Furthermore, we look at how children and young people consider their online identity(ies) and how they reflect on bullying and harassment on online platforms. Finally, we discuss whether they express trust in online information regarding source awareness and in relation to fake news as well as their general attitudes towards the reliability of online sources.

Online Behaviour and Identities

In all three countries, children and young people report being taught about online behaviour in school. 'You learn how to behave online and such' (Henrik, Norway). Several of the Estonian participants reflected on online behaviour, and when asked about how online behaviour is dealt with as a topic in school, one participant answered that it is a topic in basic school, 'but no one pays attention to it' (Mark, Estonia). Similarly,

a Norwegian child says that he has had two or three lessons on online behaviour, which were on what kind of rules apply online and 'not being mean' (Elias, Norway).

It does not appear that the children and young people are very aware of their online behaviour; for example when asked if she has experienced uncomfortable or malicious behaviour or actions online, Laura from Estonia answers: 'I think I definitely have, but I don't have a direct example to bring', indicating she doesn't really remember anymore (Laura, Estonia). Another matter is that it seems to be more acceptable to 'roast a friend' rather than a stranger (Liis, Estonia). Children and young people use sarcasm and jokes, but it is also difficult to understand the context and tone of a written text (Liis, Estonia).

Furthermore, malicious behaviour is as common on online platforms as it is in the physical world, but online, children and young people feel freer as they are anonymous: 'and no one knows it is you. So, there it doesn't really matter. I am not much better. I say what I want and do what I do' (Rasmus, Estonia). The conversation with student Rasmus from Estonia continues and when asked further about the malicious behaviour, he replies:

> **Rasmus**: Yes, [I experience it] every day on Discord or Reddit. I wouldn't say [it is] widespread, I say more like … how to explain it … I'd say I'm pretty sure people have been, well, crappy all along, now they've just moved to the Internet where everyone can hear them at the same time now.

One of the Romanian children (George, Romania) was asked about digital downsides, that is negative aspects of using digital technology. In addition to talking about too much use leading to addiction and impaired vision, the child mentioned virtual relationships as being a risk when using the Internet:

> **George**: Because people who are pretending on the Internet might not be that [person]. It would be possible for someone to say that he is 8 years old when in fact maybe he is 10 years old (Romania).

Whereas this example does not relate to grooming, a two-year age difference for this young child appears to be severe.

Online Bullying

Online bullying and harassment are sensitive topics, and it was clear that the children and young people we interviewed did not find it an easy topic to discuss. Many of them did not 'recall' any bullying episodes, and those who did mention episodes did not involve themselves. Instead, these instances had to do with either friends or acquaintances. One Romanian child answered as follows when asked whether she knew about any online dangers or risks:

> **Ioana**: Yes, digital harassment. It happened. The teacher told us.

Such answers were rather common, and the children and young people said they had heard about online bullying and harassment but had not experienced it themselves. In Estonia, one of the young people talked about online bullying as a topic in the media, but they had not noticed it much. They indicated that that does not mean 'it doesn't exist, but actually, it's like everything is up to you' (Mark, Estonia), referring to it not being such a big problem and that the victim can actively prevent online bullying episodes from happening or at least one can reduce the damage. In Mark's own words:

> **Mark**: It's [snorts with laughter] a topic in primary school, but nobody follows it up, […] online bullying was everywhere in the news, it was kind of big […] issue. But I think that, well, practically, well, I don't say like it doesn't exist, but it's all up to you. Like, if somebody writes to you, for example, but I don't know, someone in the class group says that you are stupid, well, then you get it exactly as if somebody was telling you to your face that you are stupid, right? But then somehow people take it differently. […] I don't think online bullying is that big of a problem, it's just that, well, like jokingly, like, well, you bully each other, that's okay, but that online bullying isn't really there, and I think it's so well preventable. I don't understand at all why this was a problem […] But actually, you can always

> take the video off YouTube [after having posted…] somehow, you'll find a solution.

Also in Norway, we see answers from the children and young people indicating that they have not experienced bullying themselves but that it most certainly exists even though they have not witnessed it themselves (Henrik, Norway). Lea from Norway said, 'I can't remember everything, but there may have been some drama with it [bullying] in the past, but then I haven't been a part. I haven't been a part of it because I didn't do much social media before I started in Grade 7 as I wasn't allowed at all by my parents. Then there wasn't much point …'.

Children and young people are certain about how to respond if they experience their friends being bullied. Laura from Estonia answers: 'I think we would tell each other; we would be like … look at this, this is not okay because we are relatively big [in the sense of maturity], and we would understand that it is wrong, and then we would know how to deal with it'. Others reply that it is not so easy to say something (Liis, Estonia). However, other children hesitate to tell, as this student told us: 'I've said like a few times, but usually I don't say anything' (Kelly, Estonia). When the Norwegian children and young people were asked to whom they would go to if they were to experience online bullying, most answered they would confide in a friend rather than the teacher, their parents or other adults.

Critical Source Awareness

The Norwegian participants were in general well informed about the importance of source awareness and gave several examples of how to assess the originality and truthfulness of sources. Elias from Norway says that 'the tip we got is to sort of check several websites and check if they mean the same thing … I usually just go to the same websites all the time. And then, the first time I did it, I checked to see if it [the information on the site] was true. I tend to sort of go to the same thing then' (Elias, Norway).

All of them had heard about fake news, and most of the Norwegian children and young people had also had some discussions in class about fake news and how to deal with online information.

> **Axel**: Yes, we've had it now in … we've worked on it two weeks ago. […] We learned a little bit like fake news and conspiracy theories and stuff like that. And then we read the sources on fake news, and somehow … real news, also we compared them. To see what the difference was. And it's all about source awareness. That you look through—okay, fine, how many sources say that and how many sources say this? In what way is it constructed? Does it look like a secure website? And stuff like that. … Also, we were going to make our own fake news. And then you had to […] view pages that had fake news and write, or kind of look through how they're built up. What they are made off. To make your own the best it can be. I posted a piece of fake news that the corona pandemic doesn't really exist … that there's no such thing as corona (Norway).

Several of the children and young people talk specifically about source awareness related to recognising fake news and having strategies to find out whether the information is trustworthy or not. There is no discussion around critical source awareness in the data from Romania, but this can be explained by the fact that the Romanian children were the youngest in the study. However, we may also consider that this was not seen as important in terms of education and especially due to the more recent focus in the education sector with the new Strategy for the Digitalisation of Education (2021–2027), which was in its early stages when this research was conducted.

Discussion

In this chapter, we have posed a research question that guided us in understanding digital responsibility: *How do children and young people talk about and understand digital responsibility?* Our goal was to reposition the understanding of cyber ethics from merely an instrumental concept to one that focuses on active and responsible behaviour through the

dimensions of legal, ethical and attitudinal aspects. Empowering children and young people to be competent digital citizens is complex and requires a range of actors within the various microsystems surrounding the digital generation. Our focus has been on the education system, which is tasked with supporting the development of digital citizens who possess the competences to 'actively, responsibly and continuously engage in community life' in both online and offline communities (Council of Europe, 2019, p. 16). Thus, we agree with those scholars who argue for the inclusion of respectful and tolerant behaviour towards others (Jones & Mitchell, 2016; UNICEF, 2017).

We see several aspects of children's and young people's reflections on digital responsibility connected to all three dimensions (legal, ethical and attitudinal) that are in particular important to highlight and put on the agenda for schools.

In terms of the legal aspects of digital responsibility, we see through the voices of the children and young people we interviewed that there are aspects of data protection regarding secure passwords and protecting others' privacy and copyrighted materials that need further attention. We see that when children and young people mention aspects of privacy, many of them connect that to making and using secure passwords. However, it does not appear that this is something that is taught in school, and some even say they have a password assigned to them by the school which is used for several years. It is clear they have some indication of what good passwords should include, but the active element of making or using them appears to be missing. Furthermore, such practices of having weak passwords assigned to them without any discussion even later on, do not support their responsible use of digital technology. This suggests the existence of a privacy gap (Stoilova et al., 2021), where we see a difference between the claimed concern for privacy online and contradictory behaviour.

Within the legal dimension, many of the participants appear not to understand the concept of copyrighted materials and creative commons licences. They seldom use the exact term 'copyright' when answering questions on the matter. Still, most of them know that they are not

'supposed to' copy things from the Internet. Despite children's and young people's awareness of the legal aspects, to some degree, the copy-paste culture among children and young people seems to be widespread, and they claim everyone does it and blame it, to a certain extent, on peer pressure. Thus, we see an inadequate awareness and knowledge of copyright rules and limited practice of the legal aspects of digital responsibility among children and young people (Chen & Shen, 2018; Ma et al., 2007, 2008).

What we do notice is that this is generally linked to source awareness in schools, being aware of the trustworthiness of online sources (Braasch et al., 2013) and how to cite and evaluate information rather than who is the owner of the information/content, who holds the copyright and how to protect one's content and information online. What most children and young people emphasise is the importance of critical awareness being on their teachers' agenda. According to many children and young people, this topic is significantly emphasised when they are told to look for online sources and information when, for example, discussing fake news and the trustworthiness of online sources. The Estonian and Norwegian students consider themselves in general as well informed when it comes to critical source awareness and spotting fake news. Yet, the participants tell us that while this is something stressed by their teachers, it is not something that is taught. Pérez-Escoda et al. (2021) point out that children and young people have difficulties comprehending different types of documents and that critical thinking is important for critical source awareness. This suggests a need not only to tell the digital generation to be aware of sources but to teach them how to do this in a way that promotes such awareness, allowing them to ask the 'correct' questions or question the authority of a text (Breakstone et al., 2019; Frønes et al., 2011).

In our analysis of the data, the ethical dimension appears to be challenging for the participants in all three countries. While we can identify some instances relevant to this dimension, many of these instances are found in the Norwegian data as opposed to the data from Estonia and Romania. For many of the children in Norway, this revolves mainly around trust and friendship involving responsibility not only for

themselves but also for others (Bandura, 2002) and the need to, for example, 'show them the pictures and ask if it is okay to post it or not' (Elias, Norway). While it seems that some children and young people know about privacy issues, what is less clear is where this knowledge comes from and whether knowledge necessarily leads to a display of behaviour (Boyd & Hargittai, 2010). One possible explanation is that ethical agency might be a topic that is discussed in schools for the age group we have focused on in the Norwegian dataset as opposed to the age group in Romania, where the children are younger than those in Norway. Alternatively, the participants from Estonia were older than in the other two countries, and while they may be concerned with their privacy and that of others, this is not necessarily displayed in their behaviour (Boyd & Hargittai, 2010; Taddicken, 2014). Moreover, for young people in Estonia, the line between trust and distrust and even perhaps goodwill is blurrier when it comes to someone they know versus an unknown person. For these young people, trust and goodwill are clearer within relationships based on friendship. As suggested by Bauwens and Mostmans (2020), the notion of privacy for our young people from Estonia may have 'less to do with the types of information they disclose than with their desire to exert control and this information and how has access to it' (p. 371), such as a close group of friends.

What we do not see very clearly in the data or at least to a limited degree are data displaying ethical reflections and moral responsibility on the part of children and young people, what Vallor (2010) calls virtue-based ethics. For Bebeau et al. (1999), this entails 'moral sensitivity', or understanding how our own actions affect others, and includes the capacity to reason and make judgments. Yet, as Colby and Damon (1992) note, children and young people may possess a moral awareness but may not always act morally; that is moral thinking does not necessarily coincide with moral conduct. It seems that children and young people need more support in understanding and acting in moral and ethical ways.

From the participants in Norway, we find that issues dealing with ethics or moral agency are not discussed sufficiently in school. Many of the children we spoke with claim they hear little about aspects related to

digital responsibility in school, at least they do not recall having discussed such issues, or they have vague memories about it. A few of the Norwegian children said that digital responsibility is something they heard about in primary school but have not really addressed when coming to lower secondary school and vice versa. We see vast differences in the way schools in the three countries deal with matters of digital responsibility. The curricula in the three countries include aspects of digital responsibility, but according to our respondents, it still seems to be rather random whether they learn, what they learn, when they learn and how they learn about digital responsibility in all three countries.

Our respondents, being a part of the digital generation and growing up with social media, frequently reflected on the importance of the Internet and social media in their lives (Boyd, 2010; Pandit, 2015). This is the place where they test their boundaries, experiment with their identities and in general find out who they are or who they want to become. Their online communication and behaviour play an important role in their identity formation and their online well-being and feeling of belonging. The voices of the children and young people were clear when it came to the awareness of online behaviour, trust and reliability in online communication. We were provided with several examples of online bullying and harassment, but those children and young people reflecting on these examples did not include themselves (e.g. they had only heard of it). We see that many children and young people talk about the frequency of malicious behaviour even though they are not a part of that. Also, they minimise bullying episodes, and often these episodes have to do with friends or others at school. The children and young people in Norway and Estonia have response strategies if they were to encounter bullying; that is they would tell their peers rather than teachers, parents or other adults, as previous research has also pointed out (Daneback et al., 2018), whereas the Romanian children did not reflect on these issues in the interviews.

Being social online is also related to sharing pictures and videos and the children's and young people's attitudes towards being online citizens (Mascheroni et al., 2015). The children and young people seem to

understand they are not allowed to share pictures without asking permission (both according to legal aspects but also related to ethical and attitudinal aspects). Despite them not knowing the term copyright, they are aware of rules regarding, for example, posting pictures but are less critical when it comes to copying text, pictures and videos online and using them in school assignments. So, they distinguish between their private use with peers and sharing outside of school as opposed to school-related use, where it appears they are more relaxed in following copyright rules and sharing content in presentations and various assignments.

We noticed a difference in the country data that may be explained by the children's ages and levels of access and thus years of use and/or exposure. In Romania, access is not as widespread as in Estonia and Norway, and the children are more preoccupied with what is legally right or wrong (legal and ethical dimensions) and do not reflect on responsible behaviour (attitudinal dimension). This can be due to their young age. Aspects of risk and stranger-danger dominated the answers from Romania, and the topics from the children were predominantly on hackers, strangers, viruses, theft of information and other negative sides of being online. This we also see in the Norwegian data, that is being careful with handling your personal information or address. In Estonia, where the respondents were older, we noticed a laissez-faire attitude by some of the respondents and a rather rebellious attitude, such as that they had heard about digital responsibility and the risks but did not care. The online behaviour of children and young people is based on the social agreements and norms between friends and peers and less on the legislative perspective. Although slightly older children and young people in particular have a certain understanding of rules and regulations, their own norms at times overrule such rules and regulations. That the children and young people are concerned not only with their privacy but also their willingness to share personal information might suggest that this has less to do with issues of privacy and more to do with how they exert control of what is being shared and with whom.

Based on the voices of the children and young people in our study, there is a need for strengthening the various aspects of digital responsibility within schools and, we would like to suggest, ultimately in teachers'

preparations in teacher education, as we can also see in previous studies (Gudmundsdottir & Hatlevik, 2018; Gudmundsdottir et al., 2020). In Romania, there is especially a great need when it comes to digital responsibility and citizenship that goes beyond plagiarism concerns and data theft. There, we still see caution in using digital technology in schools, which translates to a failure to integrate responsible uses of digital technologies in the educational process, to stick to more basic uses of digital technologies or even to rejecting them altogether.

Conclusion

This study sheds light on the importance of children's and young people's reflection and awareness regarding copyright and privacy issues, moral agency, and their online behaviour and identity. It emphasises the need for children to develop as critical and reflective learners, considering their own actions and the behaviour of their peers. Additionally, the findings highlight the significance of source awareness, trust in online information, and attitudes towards the reliability of online sources.

We have used the PEAT model for analytical purposes, utilising the ethical and attitudinal dimensions of the model to explore the concept of digital responsibility. In addition, we have expanded the ethical dimension to incorporate a legal aspect. The PEAT framework was originally developed to study the development of digital competence by teachers and student teachers. By linking the concept of digital responsibility to the framework and highlighting children's and young people's voices, we seek to strengthen the coherence between the theoretical construct of the concept and its practical application in schools. By integrating the theoretical construct of digital responsibility with practical application in schools, educators can better equip students with the necessary skills and attitudes to navigate the digital landscape responsibly. Furthermore, the integration of the PEAT model and the voices of children and young people in this study emphasises the importance of collaborative efforts

among researchers, educators, policymakers, and other stakeholders. With joint effort, we can collectively enhance digital responsibility and address its multifaceted challenges.

By comparing the viewpoints of school children and young people in three different countries, this chapter contributes to highlighting some of the challenges associated with digital responsibility. Furthermore, it broadens the scope of cross-national comparisons, as previously advocated in research. Nonetheless, we recognise the need for further research that includes children's perspectives on the meaning of digital responsibility and how it is addressed at the local level within schools. Moreover, there is a growing need to address the complete ecosystem surrounding children and young people, including families, and how awareness (attitudes and understanding) of online behaviour can be enhanced at all levels. This applies to both the legal and ethical aspects of digital responsibility as well as the consequences of children's use of digital technology for themselves and their peers. Future research can also delve deeper into understanding the dynamics of peer influence and how it can be harnessed positively to promote digital responsibility.

Finally, we have responded to prior calls for amplifying children's voices, moving away from studies primarily rooted in an adult perspective. It becomes evident that peers play an important role in children's and young people's moral agency and their online behaviour. Therefore, it may be advantageous to further engage with children themselves and enhance their awareness of the different dimensions of digital responsibility discussed in this chapter. While adults, including parents, teachers and teacher educators, hold a crucial role in this process, they can to a greater extent recognise how important and intertwined digital technology is in the lives of children and young people. Hence, it is imperative to understand the perspectives of the younger generation and attentively listen to their voices, as we have emphasised throughout this chapter.

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