Net Children
Go Mobile

European children and their carers'
understanding of use, risks
and safety issues relating
to convergent mobile media.

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Qualitative findings
Report

October 2014

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www.netchildrengomobile.eu

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PLEASE CITE AS:

Haddon, L. and Vincent, J. (eds.) (2014). *European children and their carers' understanding of use, risks and safety issues relating to convergent mobile media.* Report D4.1. Milano: Unicatt.

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Executive Summary

The main focus of this report is on children's experience of mobile media and the mobile internet, with an emphasis on smartphones and tablets. Ultimately the project is interested in risk and safety issues, but to contextualise this, the report also considers children's adoption and use of these devices and the wider consequences that follow. The research involved a qualitative study of children, their parents, teachers and others working with young people in nine European countries: Belgium, Denmark, Germany, Ireland, Italy, Portugal Romania, Spain and the UK.

Adoption and Use

Children experience smartphones and tablets at a younger age than ownership figures show, but this often only involves using limited features like games on their parent's smartphones. Although many children become interested in getting smartphones, partly reflecting the influence of peers, **sometimes they are not the ones requesting these devices** – smartphones can be unexpected and unrequested gifts and hand-me-downs. In fact, children can be surprisingly **sophisticated consumers** when evaluating whether they really need these devices. When children gain ownership of tablets and smartphones they sometimes let other family members use them, and having their own device does not preclude children from continuing to access other people' s, including more powerful or in other ways more advanced ones.

The cost of using smartphones, time limitations imposed upon when they can be used, **rules restricting use in schools and fear of phones being stolen in public all help to constrain the use of these devices**. This qualifies claims that children, especially younger children, can use them "anytime/anywhere" and that they are always "at hand." In practice this is often not the case. Children are limited both by their financial dependence and

the regulation of their use by adults such as parents and teachers. No wonder that **the location where smartphones and tablets are used most by children is in the home, safe places with free wifi, and not on the move.**

Independently of parental pressures, some children impose time limits on their own use (e.g., prioritising other activities, including school homework). Sometimes children appreciate how smartphones can be a distraction, **"wasting their time"** and hence they can be wary of using the devices too much.

Smartphones and tablets have to fit into an ecology of ICTs that children already have access to, and **the new devices do not simply replace the old ones** – the picture is far more complex. Children use a combination of smartphones, tablets, laptops, PCs and games consoles to go online, depending on the purpose and circumstance, sometimes even using several device in conjunction. Nor does usage of mobile devices remain static. Moreover, this does not mean simply ever broader use of these devices (although for many children this is the case). By On the contrary, children can reduce certain patterns of usage or change from one pattern to another.

Changes and consequences

Conversations (verbal or textual) between children during the day continue when they are separated at the end of the day en route home and then during the evening and into the night. While this is not a new practice, it appears the **multiple means of simultaneous communication have intensified this continual contact**.

Many children believe they are **more sociable since having a smartphone**, especially because these can be "at hand" and some apps like WhatsApp enable free of charge and group communication. However, the downside is that some children report being **annoyed by having to be constantly available to peers**, even though they to varying degrees conform to the social pressure to be "always on". The availability of 24/7 information feeds also means that some children find themselves scrolling through SNSs

notifications, finding nothing for them or nothing new but looking again and again just in case they have missed something.

Constant communication from peers are particularly criticised by adults, especially parents, who are concerned by the fact that children are continuously distracted by what seemingly "irrelevant" messages while they are doing their homework. Even children discussed being **distracted by constantly receiving notifications from chats**. In fact, some children note that the noise - literally and figuratively - of WhatsApp conversations is one of the main reason leading them to reduce participation in peer groups of any sort on the app.

Smartphones can also disturb co-present interaction. Many children in all countries were critical of the fact that some peers spend time that should be for face-to-face interaction writing textual messages to distant others. This critical evaluation is captured in such phrases as "If you wanted to do that you could have stayed at home!" More generally, smartphones can decrease time spent together face to face. Younger children, for example, sometimes lament the decline in interaction in school time, especially in school breaks that were once dedicated to collective activities.

Children also raise the issue of how increased communication opportunities have led to more social drama online generally and in some cases to more aggressive communication.

Risks

While the children recognise that many of the general risks they experience online also apply to smartphones and tablets, they point out that these mobile devices can enhance risks or pose them in new forms. This can be because of the increased opportunity for communication one-to-one and one-to-groups allowed by multiple SNSs and messaging apps and services, the quickness with which one can react and reply or the because of small size and portability of the devices. The latter, for example, makes it **easier to take "stupid" pictures or record "embarrassing" incidents**, which can be

shared immediately with little effort. The children provided examples of how that portability makes it easier for young people to take each other's smartphones and send rude messages directly from the accounts of the owner or to answer messages pretending to be the owner. Meanwhile the new platforms catering for groups of users can also facilitate the dissemination of screenshots of private chats into group chat windows. **Bullying and harassment can also take on new shapes**, as when children are anonymously bullied on WhatsApp as a consequence of their phone numbers being exchanged without permission or of their belonging to WhatsApp groups with people they have never met face-to-face.

There are some **risks more specific to these mobile devices**. One of children's chief worries is about **losing such expensive devices or having them stolen**. There were some concerns expressed about **the potential misuse of the geo-location function** on smartphones to track them or tell when nobody was home. Children also complained about having to deal with **hidden financial costs of apps** and when they spend more than intended because of too much data usage.

Many children appeared to be themselves wary of **the dangers of becoming over-dependent on the devices and associated apps**, such as WhatsApp, sometimes feel compelled to check their devices regularly.

Regarding coping and preventive measures, children generally deal with risks on mobile devices similar to the way in which they deal with risks on the internet more generally. However, as mobile devices seem to provoke more issues related to overuse, **children now come up with more (preventive) measures to deal with the consequences of the omnipresence of mobile devices**, such as leaving the device in another room, turn it into "silent mode", etc. They often talk spontaneously about **self-monitoring tactics to avoid overdependence of mobile devices**. Meanwhile, the most common strategy to avoid loss or theft involves not taking the devices outside the home, especially not to outdoor activities or public places with many people. And many children claim they turn off or change the geo-location functions in order to protect them from

strangers or people with bad intentions trying to find them.

Parental Mediation

Some parents are happier to equip their child with the newest technological device, also guided by **the desire to give their children what their peers have**. Just as in the case of any other consumer good, smartphones are tokens in the parent-child relationship and can be used, for example, as rewards. But other parents problematise the decision to give their children access to a smartphone, and reflect on what age children are mature and responsible enough to use smartphones, in part because of their expense. Hence, in these households **smartphones are often supplied at stages marking such maturity, as Holy Communion** (in Catholic countries) **or going to secondary school**.

When basic mobile phones were first used by children, the implications for parents' ability to monitor children was mixed – it was a means for parents to call and check up on children, but children could interact with peers out of sight of the parents. The equivalent **complexity** applies in the case of smartphones. When parents now use geo-location properties to monitor their children's whereabouts, sometimes children see that this can be useful, as when they need their parents to pick them up. At other times it can be perceived more negatively, enhancing **the role of the smartphone as "electronic leash"**. At the same time, many parents note that it is **more difficult to monitor their children's internet use by checking the device history because of the portability of these devices, their more private nature** (compared to a PC) **and (some) children's greater skills in using these technologies**. This poses questions of whether parents have to rely on trusting their children more.

Rules regarding place and time of use of mobile devices are still perceived by parents as efficient ways to regulate children's use. The difference compared to mobile phones is that now that concern extends to children spending too much time using screens or going online, as well as concerns about the loss or theft of such expensive devise. **Parents sometimes perceive the smartphone as leading to greater overuse of the device** (even compared to traditional mobile phones) and certainly as reducing the time children spend interacting with family members. As in the case of earlier mobile phone, rules about the use of smartphones, and also tablets, can also be a source of conflicts and tension among family members.

There is sometimes an issue of consistency of rules: sometimes the two parents adopt different, and contrasting, rules regarding smartphone use. As in the case of earlier mobile phones, the efficacy of rules is age-dependent: younger children are more likely to comply with rules than teenagers.

Teacher and school mediation

The qualitative research reinforces and extends the survey findings: **rules about having and using smartphones in schools vary by country, by school, and also by the age of the child** (with more tolerance for older children). While the use of smartphones is usually forbidden in class time and sometimes in school generally, teachers of secondary schools may make some concessions. However, teachers of the same student can set different rules and hold diverging approaches regarding smartphones' role in class.

Sometimes students do not comply with rules: they forget to turn off their ringtones, they send texts, check social network sites secretly or play games (both in class and in the toilets). Some teachers note that such use can be difficult to detect. **When rule-breaking is discovered confiscating the smartphone is the most common sanction**. However, confiscating the phone can be **a problematic strategy** for teachers, when they have to take responsibility for safeguarding the device.

Access to smartphones in schools can be empowering for students, as they can in some circumstances independently verify what they are learning and record teachers giving views that are not sanctioned by the schools. But even children

acknowledge that the use of smartphones in school can be distracting and hence often feel that devices should be to some extent regulated. More negatively, smartphones can be used against teachers, in terms of posting comments about or taking and posting pictures of teachers, amounting to a form of harassment.

Most of the problematic situations related to smartphones that teachers have to cope with relate to privacy risks or to the production and exchange of negative user generated content. Children sometimes feel that their teachers do not manage risky conduct appropriately, and would welcome a greater involvement on their part.

Challenges faced by teachers in managing and mediating their students use of digital devices include their own poor digital skills, the fact that devices can potential exacerbate the problem of plagiarism and the need to provide students with equality of access to technologies, which can be undermined if students use their personal mobile devices in schools.

Some teachers and parents do see the positive potential for allowing mobile device use in school, especially tablets. Their introduction could facilitate the more general trend towards the educational system becoming more digitally orientated, with access to interactive material, challenging children to look up material in real time and reducing the need for (heavy) paper books and resources. One barrier to allowing access, especially to smartphones but to some extent to tablets, is they are still not seen as being educational tools, but are more associated with entertainment and in the case of smartphones, with communication.

1 Introduction

The main focus of this report is on children's experience of mobile media and the mobile internet, with an emphasis on smartphones and tablets. Ultimately the project is interested in risk and safety issues, but to contextualise this, the report also considers children's adoption and use of these devices and the wider consequences that follow. The research involved a qualitative study of children, their parents, teachers and others working with young people in nine European countries: Belgium, Denmark, Germany, Ireland, Italy, Portugal Romania, Spain and the UK.

The report builds on the related previous studies, first being the survey conducted by Net Children Go Mobile (Mascheroni & Ólafsson, 2014), which covered patterns of smartphone and tablet use, as well as risk issues. The current qualitative study reported here provides an opportunity to reflect on some of the statistics and explore further some of the patterns identified through in-depth interviews where children, parents and others could explain their perspectives and decisions. The second report is the qualitative study conducted by the EU Kids Online network (Smahel & Wright, 2014). It is worth adding that all the national teams in Net Children Go Mobile took part in the EU Kids Online project generally, and many also took part in that EU Kids Online qualitative study. Hence this is very much a sister project, often noting what difference mobile internet access makes compared to the general internet access examined in the EU Kids Online study.

However, there are some differences from the previous EU Kids Online qualitative research. In general there is still only a limited amount of research on smartphones (Verkasalo et al., 2010; Lee, 2013), even less on smartphones and children (Bertel, 2013) and little on tablets (Park, 2013). It was therefore important to spend more time in the Net Children Go mobile project establishing how children acquire and use these devices and why those patterns exist, since it might have repercussions for risk and safety issues. Based on a similar rationale, we also asked more general questions about what difference these devices, and this mobile internet makes in young people's lives, and how they (and adults) evaluate

those changes. The aim is to put the discussion of risks and safety into a broader perspective, for example, to see what issues are problematic for parents, teachers and children and how that compares to their evaluation of areas of risk identified elsewhere (Livingstone et al., 2012). The report then discusses risk perceptions, experiences and how children cope. It goes on to consider the challenges to parental mediation of their children's internet experience that are posed by these devices. Finally, and more developed compared to the earlier EU Kids Online study, it considers the role and perceptions of schools and teachers. The other main difference from the EU Kids Online study is that the individual and group interviews with parents were more extensive in order to hear their perspectives; group interviews were also conducted with teachers and others working with children, such as youth workers.

1.1 Methodology

1.1.1 Pilot phase

At least one pilot focus group and one interview with children was conducted in each participating country: Germany and Spain were excluded as they joined the project in a later phase - from September to December 2013. The pilot tested:

- the interview schedules, that is that the children of different ages could understand and answer the questions and could manage interviews lasting this long;

- the efficacy of the post-it sticker exercise used as an initial ice-breaking activity (Fig. 1), from which we expected children to share their perceptions of smartphones and tablets, including both positive and negative consequences;

- that all national teams summarised the interviews in a similar way;

- the coding guide and coding principles (e.g., what types of key codes emerged from the process, in addition to the ones that had already been successfully employed in the EU Kids Online III study?;

Fig. 1 - Post-it stickers exercise

- the sampling strategy (due to country variations, e.g., different school cultures and different procedures to go through schools, etc.).

1.1.2 Sampling strategy

The main fieldwork was carried out from January to September 2014, and was conducted in two phases: research with children was generally completed by the end of April 2014; research with adults (parents, teachers, youth workers) continued in certain countries until September 2014.

The sampling principles had been discussed and agreed on during the second network meeting in July 2013, but were subject to re-adjustments during the course of the fieldwork; recruiting parents, teachers and youth workers proved particularly difficult in certain countries such as Denmark and Ireland, and alternative sampling strategies or interview methods (interviews instead of focus groups) were agreed.

Children were recruited in schools, where the focus groups and interviews also took place. The minimum permissions we would collect would be from the school head/the teacher and the child. Half of the countries also needed to get parental permission. Some countries also needed permission from national bodies. The coordinator created invitation and consent forms for parents, invitation and consent

forms for schools/teachers, and a consent form to be signed by participating children. The average number of focus groups was six in each country, three with girls and three with boys, with age distributions of 9-10, 11-13, and 14-16 (two focus groups each). Four or five children were included in each focus group. Children used for the interviews were different from the children included in the focus groups. The average number of interviews was 12 in each country, six for each gender, with the same age distribution as for the focus groups. Young people were selected from at least three different schools and/or youth centres, chosen to ensure a balanced composition of the sample in terms of type of school, area and socio-economic background of the families (public x private, city x suburban x rural). There were **55 focus groups** (N = 219) and **107 interviews** (N = 108) conducted across the nine countries (see Table 1 for an overview of the data collection).

Parents were recruited through schools, parents associations, sport clubs and researcher's contacts. The average number of focus groups with parents was six, two for each children's age group (9-10, 11-13, and 14-16). Where the recruitment of parents and the organisation of focus groups was particularly challenging, focus groups were replaced by individual interviews. A similar procedure was followed with teachers and youth workers, who were also recruited through schools, teachers associations, youth centres or after-school programmes and researchers' personal contacts. In some countries focus groups were replaced with individual interviews. The average number of focus groups was two with teachers (one group for primary school and one for secondary school teachers) and one with youth workers. Overall, there were **40 focus groups** (N = 180) and **44 interviews** (N = 50) with adults conducted across the nine countries (see Table 1).

Table 1 - Overview of data collection

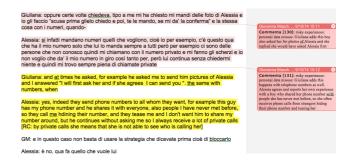| Countries	CHILDREN				PARENTS				TEACHERS				YOUTH WORKERS			
	Focus groups		Interviews		Focus groups		Interviews		Focus groups		Interviews		Focus groups		Interviews	
	Number	N (males + females)	Number	N (males + females)	Number	N (males + females)	Number	N (males + females)	Number	N (males + females)	Number	N (males + females)	Number	N (males + females)	Number	N (males + females)
Belgium	9	38 (14+24)	0		3	7 (2+5)	13	13(1+12)	2	8 (5+3)	1	1 (0+1)	1	5 (2+3)	0	
Denmark	6	23 (11+12)	11	11 (5+6)	0		10	15 (6+9)	0		4	4 (2+2)	0		2	2 (1+1)
Germany	5	22 (11+11)	12	18 (7+11)	2	6 (2+4)	6	6 (0+6)	0		5	6 (3+3)	0		1	1 (0+1)
Ireland	6	26 (14+12)	12	12 (6+6)	2	11 (5+ 6)	0		0		0		1		0	
Italy	7	29 (17+12)	13	14 (6+8)	6	30 (9+21)	0		2	14 (6+8)	0		1	5 (1+4)	0	
Portugal	4	13 (7 + 6)	12	12 (7 + 5)	3	10 (5 + 5)	0		2	7 (3 + 4)	0		0		0	
Romania	7	28 (16+12)	15	15 (7+8)	6	30 (11+19)	0		2	10 (1+9)	0		1	3 (0+3)		
Spain	5	19 (11+8)	16	16 (6+10)	0		0		0		0		0		0	
UK	6	21(10+11)	16	16(7+9)	3	17 (1+16)	2	2 (1+1)	2	13 (2+11)	0		1	4 (2 +2)	0	
ALL	55	219	107	108	25	111	31	36	10	52	10	11	5	17	3	3

1.1.3 Data collection, coding and analysis

The focus groups and interviews with both children and adults followed a similar structure and investigated the following topics:

- **Adoption and use of mobile devices**: how and when children acquire smartphones and tablets, and what their favourite activities/practices on these devices are.

- **Changes and consequences:** the main changes in children's everyday life from the viewpoint of children and parents, teachers or youth workers that are directly associated with new portable devices.

- **Specific risks and problematic situations** associated with mobile internet use according to children, parents, teachers and youth workers.

- **Parental mediation**: how, according to children, parents regulate their use of mobile devices; what mediation strategies parents engage in and how efficiently; how parental mediation of children's mobile internet use is perceived by teachers and youth workers.

- **School mediation**: how, according to children, the use of mobile devices is regulated at school and what mediation they receive from teachers; what rules and other mediation activities teachers adopt; how teachers' mediation of children's mobile internet use is perceived by parents and youth workers.

As anticipated, interviews and focus groups were thematically analysed through two levels of coding.

To avoid translating all transcripts into English, in the first level of coded, national teams summarised in English the key points using the comment function in word, and translated relevant excerpts, as in the example below.

Fig. 2 - Example of first level of coding

The comments were then coded in the coding manual that has been defined based on feedback from the pilot interviews and focus groups:

Fig. 3 - Example of second level of coding

Based on the different areas covered in the coding manual, sub-groups within the project, including researchers from different countries, looked at particular themes across all the national interviews and focus groups.

2 Adoption and use of smartphones and tablets

2.1 Introduction

Leslie Haddon

The first part of this chapter deals with the take-up of smartphones and tablets, covering:

- the apprenticeships that children sometimes serve before getting their own devices:

- the various motivations for and hence paths to owning them:

- factors shaping the age when these devices are acquired:

- the degree of family sharing of devices that continues afterwards.

This shows some of the diverse processes at work behind the ownership statistics, enabling us to also reflect on the age at which such devices may be owned in the future.

In contrast to counter-celebratory accounts of how children as a digital generation are embracing these new technologies, the next section highlights the factors that actually constrain their use, so that in practice they are not "anytime, anywhere", "always at hand" technologies for children. These include:

- financial considerations

- time limitations

- the regulation of use in certain spaces,

The penultimate section deals with the relation between these new devices and the existing ones that children possess,

- It shows the ways in which smartphones and tablets are entering into an ecology of existing technologies that children already possess, which can also constrain the use of these new arrivals as they fight for a role amid a repertoire of devices and communication possibilities.

The final section deals with how use of smartphones and tablets change over time.

- It shows how the subsequent evolution of use is also a complex process shaped by numerous factors.

2.2 The path to acquiring devices

The Net Children Go Mobile survey showed that 51% of children in 2013 said they "owned" a smartphone and 20% said they "owned" a tablet (Mascheroni & Ólafsson, 2014). However, that report also suggested that far more children actually accessed such devices. The in-depth interviews in the current research illustrate how many children will have experienced these technologies before owning them. More generally research into the domestication of ICTs has shown that there are usually processes of becoming familiar with these devices (or services) before actually acquiring them. And we must remember that although smartphones and tablets were innovations there were precursors in terms of devices that had some of the same functionalities. For example, it was possible to access the internet by more traditional mobile phones before the smartphone appeared and some children did indeed do so (Haddon & Vincent, 2009).

2.2.1 Apprenticeships

In the case of both smartphones and tablets, some children in effect **serve apprenticeships** (Lelong & Thomas, 2001)**, using or trying out other family members' devices before they had their own**. This can start at an early age, as when John (boy, 9-10, UK) reported how his six year old sister regularly played with their mother's broken BlackBerry: "*She just wants*

to pretend she's all girly, like. Blah, blah, blah. Always on the phone, texting!" Often devices were first borrowed by young children specifically to play games, as when Francesco, a 10 year-old Italian boy, still borrows his mother's smartphones for that purpose, while nine year old Anita (girl, 9-10, Italy) first used her father's iPad for gaming, and was at that stage not allowed to use other apps because these related to his work. Andrea (boy, 9-10, Italy) already had his own basic mobile but in addition sometimes borrowed his brother's smartphone, while John (boy, 9-10, boy, UK) had already been borrowing his father's iPad for three years until he got his own. While he might have now returned his father's one there was also an option to go back to using it.

John: He (his father) basically got his iPad back, because I was always on his. Because now I've got my own so I won't be on his anymore…unless it breaks.
(boy, 9-10, UK)

Sometimes this apprenticeship entailed using or at least seeing peer's devices, such as their tablets. For example Fletcher (boy, 9-10, UK) had experimented with his friend's one and subsequently he requested one from his parents. When he got it "*They were amazed, and I showed them what I could do on it*". While most such encounters with the devices are through family or peer networks, Giorgia (girl, 16, Italy) reported that she first got used to using an iPad at school before later getting her own.

In sum, **many children gain some access to and experience of smartphones and tablets before they own them, meaning more encounter these devices at an earlier age than is suggested by ownership statistics. However, as regards the implications for risks, such access is often limited, especially to using the devices for games**.

2.2.2 Motivations for acquiring devices

Enthusiastic accounts of "digital natives" (Prensky, 2001), of a generation of children embracing new technology, might lead us to believe that the demand for smartphones and tablets always came from the young people themselves. In some instances this is the case, **although it may not be the technology**

that is the focus so much as wanting to have what was fashionable among peers – and that in principle could apply to many other artefacts held dear in youth culture. Indeed, there were cases of actual peer pressure as when Lilya and Anna (girls, 11-13, Romania) told how their classmates used to laugh at them because of their old mobile phones until they acquired smartphones.

In other words, sometimes the technology is attractive, but that is not the only process at work. In the discussion below, we also see a variety of bases for interest in a particular kind of smartphone, a BlackBerry, for its features or "affordances" (music storage) and aesthetics, but also touching on fashion among peers as well as wanting to have what older "young people" have:

Interviewer: You mean, because somebody has a Blackberry, someone else wants a BlackBerry.
Roxana: No, because it has lots of music on it.
Jenna: No, because everyone just copies each other.
Interviewer: You just think it's that – nothing special about the BlackBerry that the other ones haven't got.
Krystal: I like it. I like the shiny bit at the back.
Roxana: Yes, at the front it's like the words are together and squashed and then you can… [indicates typing with two thumbs] and lots of teenagers have it.
Krystal: So that's why you wanted it.
Roxana: Yes.
Interviewer: What, Blackberries?
Roxana: Yes, lots of teenagers and college students have them because the keys are squashed and you can…
Jenna: You could type faster. No, I think it's difficult because the keys are so small.
Krystal: Yes, they go like that - the college students go like that [indicates typing with thumbs].
Jenna: They type so fast.
Interviewer: So you try and do that as well?
Roxana: Yeah.
Interviewer: Why, because it's cool?
Roxana: Yes.
(girls, 9-10, UK)

There were aspects of smartphones that appealed and differentiated them from older mobile phones. For example, some mentioned the appeal of the touchscreen, and others its QWERTY keypad. Others referred to the ease of going online. For yet others it was the popularity of a particular app, especially WhatsApp. But many comments among those to whom smartphones appealed sounded similar to

what some fashion-conscious children were saying a decade ago about mobile phones. **In other words, sometimes the smartphone seems to be really just the latest, and cool, incarnation of a mobile phone**. And that is also true for some parents. For example, when their (usually slightly older than age 10) child first needed some kind of mobile phone because they were travelling and needed to be in touch, some parents across the countries simply bought them a smartphone, even when a more traditional mobile phone would have sufficed.

Other parents, however, spent a little more time thinking about how the smartphone was qualitatively different from a mobile phone. We will see this in the next section's discussions concerning whether children are mature enough to have such devices. **And part of the difference lay not only in what the technology could do but also in buying such an expensive item for children to carry around**. In fact, the children were also conscious of this:

Fabio: I didn't have a phone, mine was broken. It was one of those old Nokias. So my dad realised I didn't have a phone and gave me his. I didn't want it at first, because I had lost many. I have never had expensive phones before, because I don't care much, do you know what I mean? So initially it was not very… But then he gave it me and so I thanked him.
(boy, 16, Italy)

In a similar vein, Gaia commented about acquiring her iPhone:

Gaia: I am quite worried… Also because I am hare-brained, I mean, so I am always concerned I might lose it, it could be stolen. Because I didn't really ask to have an iPhone. My grandparents gave it to me and I have risked losing it several times…. yes, I am happy I have it but it is not really that I need it. Though the more I use it, as time passes by, it is turning into a need. But I could have a cheaper phone, less expensive, less important, because it makes me anxious, as wearing an expensive watch.

(girls, 14-16, Italy)

These young people are by no means the only interviewees for whom **the smartphone was an unrequested and unexpected gift**. The Danish account below suggests that **parents can also be fashion conscious about what their children have relative to their peers**, in the same way that they might buy designer clothing for their children.

Ea: At first I didn't even want one! I got it for Christmas, and then my parents said: 'Now you need a new phone, because everyone else has a touch phone'. At first I thought: what should I use that for, I have my Nokia phone? But then I became fond of it.
(girl, 11-13, Denmark)

This section, then, paints a mixed picture, where it is **not simply the case of children driving demand for these innovations**. Some have an interest in these technologies, and although the examples are mainly about the smartphone, there were equivalent comments about children wanting tablets. But part of that demand is not specific to technologies: it is about wanting things that are fashionable. And some of that demand does not relate to specific features of, say, smartphones, but more to the fact that they are the latest technology. Meanwhile, the final examples show that sometimes the initiative does not come from the children at all but rather from parents or other relatives wanting to buy them gifts – and **these children can be critical consumers, reflecting on whether they really need these particular gifts and whether they have disadvantages**, as when Alice (girl, 15, Romania) remembers when the iPhones appeared *"And everybody was saying 'my mom got me this and that'. But the old type phones were better, the battery lasted longer and they didn't break so easily!"*

2.2.3 Age of acquiring devices

The Net Children Go Mobile survey noted that children own mobile phones or smartphones at ever younger ages (Mascheroni & Ólafsson, 2014, p. 18). However, the section above has already shown that such statistics hide some more complex processes, whereby children actually access and use technologies at even younger ages. In addition, there are different factors at work affecting the timing of letting a child own a device, especially expensive portable smartphones (given that tablets are carried outside the home less often).

One issue mentioned by both parents and children is **whether children are "mature" enough to have these devices**, especially the more expensive smartphone. As Joost (boy, 12-13, Belgium) explains, he has to "*prove*" he can responsibly look after a mobile phone for 2 years before his parents would

buy him a smartphone. Sometimes that decision about being responsible is flexible, depending on the child, **but a number of children refer to getting the smartphone at certain life stages, almost as a rite of passage,** similar to the children (age 11-16) researched by Vincent (2004) in the UK. Hence some mentioned being allowed to have a smartphone when they changed school to a more senior school (e.g., at age 11). Acquiring a smartphone at that stage looks in part like the transition intended to mark a step to more maturity. The other such marker, mentioned in Italy and Spain, the Catholic countries of southern Europe, was getting a smartphone or tablet for the first Holy Communion (e.g., Giada, girl, 10, Italy) or as a Confirmation gift. **If some parents are using these thresholds as turning points to mark maturity, then these are relatively fixed points in time – the age of getting a smartphone is unlikely to drop in these households**[1].

However, there are other occasions for acquiring smartphones where we can see why the age may become lower. Many children mentioned getting smartphones for their birthdays. While this is itself a marker of an age-stage, which birthday is chosen can obviously vary so there is scope for younger children to get these devices. Another moment, mentioned a number of times in interviews, is **when parents promise the smartphone as a reward, especially for success in school. Perhaps years ago the reward might have been something else that was a "must have", "fashionable with present peers", but now it happens to be the smartphone or tablet that is desired**. Sometimes the device is a travel gift, for example tablets brought back from the US or China where they are cheaper than in Europe. The other factor, that has more to do with the parents than the child, is hand-me-down phones, especially when parents (but sometimes siblings) upgrade. **In the past a more basic mobile might have been inherited in this way, but now the phone that the parent or other relative can pass on is itself a smartphone**, as demonstrated in the last section, by Fabio from Italy.

As a result, beneath the statistics showing the declining age at which children get smartphones

there are several different processes at work. In some families there is inertia in that the occasion for granting a child this device is relatively fixed. But for others it is clear that there is scope for the age to drop further.

2.2.4 Beyond ownership: sharing and borrowing

Certain devices, and this applies more to tablets, in some households are never personally owned. They remain shared, collectively bought "for the family" or at least "for the children", like some family laptops or personal computers. Or, less commonly, they may be shared not between siblings but across generations, as between a daughter and her father (girl, 12, Italy) or a son and his mother (boy, 9, Italy).

However, **personal ownership is important because children may have potentially less restricted access and scope for use by virtue of no longer having to share a device**.

Giada: I was happy because I have something that is mine and nobody could use it without my permission. Because before my dad had a tablet, so I had to use it with my sister. Therefore if I wanted some games and she didn't, we had to negotiate. Instead I can now download all that I want.
(girl, 10, Italy)

However, even when young people do eventually come to own these portable devices, they may still be shared in the sense that siblings or parents borrow the children's smartphones or tablets such as when the adult's own device is on charge. For example although Giada's father had owned an iPad, he still borrows his daughter's one specifically for a particular app that she has on her tablet: *"Sky go to Watch Cable TV"* (girl, 10, Italy). Fletcher (boy, 9-10, UK) only uses his smartphone a few times a month, but his mother sometimes borrows it when her own one runs out of credit. Of course, such borrowing may come with some rules as when Jackie, valuing her privacy, insists that those borrowing the phone do not look at her messages (girl, 14-16, Belgium). And even though Paolo's (boy, 14, Italy) sister has her own smartphone as it is slow he lends her his one for her to use for sending Instagram messages. Meanwhile, even when children own their devices, they may in turn still borrow those of their relatives. For example,

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[1] Since these are specifically Catholic ceremonies. This may also contribute to some country (and intra country) variation, as might

Benedetta (girl, 9, Italy) had her own iPhone 4 but sometimes borrowed her mum's iPhone 5. We can see in these processes how **ownership does not rule out the continuing sharing of devices, and does not preclude children continuing to access other people's devices, including more powerful or in other ways more advanced ones**.

2.3 Constraints on use

2.3.1 Financial cost constraints

The amount of money involved in acquiring and subsequently using smartphones was especially important for both children and their parents at various stages. Leading up to the initial acquisition of devices, many **parents clearly take these costs into account, in part referring to expensive items that might potentially be lost or stolen or that simply break** (some commented that certain smartphone models seemed more fragile in this sense than others). The cost of smartphones in particular influenced not only whether but also at what stage children might be allowed to have these devices, as noted in the earlier section on the age of acquisition. This also influenced which model they might get.

Marco: We went to the shopping mall and there were two phones that I liked most, so we checked the plan first, and then we chose the most convenient, since my mother says it doesn't have to be beautiful for me to show off, it has to be useful.
(boy, 12, Italy)

While some children may be more fashion-conscious than others and lobby for brands like the iPhone, many clearly also appreciate the financial cost issues. As when critically evaluating their gifts in a previous section, some of the children also say they did not really need the more expensive devices. Moreover, those who partly contribute to buying the device or who saved up themselves for tablets and smartphones certainly choose their models carefully. In other households, children like Lars (boy, 14, Germany) negotiated a deal with his parents so that when he wanted a more expensive version of a tablet, he had to pay the difference. Meanwhile João (boy, 14, Portugal) resisted getting a tablet at all because '*The*

money spent with tablets could go to other things.' He thought a small laptop was better value for money than a tablet. **So many children were sensitive to how much these devices cost** and some openly complained about how expensive smartphones were in particular.

After acquisition **financial considerations often have a bearing on what apps children download**. Across countries, not just in less economically prosperous ones, some parents had advised their children to stick to free downloads (free apps, free games, free music downloads) occasionally adding that if the child really wanted to download something expensive, they would have to pay for it themselves. Where the parents had agreed to pay for downloads, younger children in particular often point out that they have to ask their parent's permission first. But many young people just stick to downloading free apps, especially games, at times arguing that they are good enough and the games you had to buy are too dear or else bought a limited number of apps if they were really popular, as when Ea (girl, 11-13, Denmark) bought the game Minecraft for her smartphone.

Running costs also influence usage. Some, often older, children are very knowledgeable about the ISP (internet service provider) tariff plans for their smartphones, and even when they do not know all the details with a few exceptions they had a good deal of awareness of the package they were on. This can influence their evaluation of smartphone apps, several noting how Snapchat and WhatsApp were good in part because they were free and hence could replace texting. Valerio (boy, 13, Italy) explicitly said that he had wanted to acquire his smartphone in the first place specifically to get hold of WhatsApp.

In the most extreme cases[2], children like Ricardo (boy, 13, Portugal) had smartphones but **simply did not use the smartphone for accessing the internet** - in Ricardo's case he did not want to spend money "*on this stuff*". Meanwhile Marco (boy, 15, Portugal) had recently deactivated his 3G access because his internet tariff became too expensive for accessing the internet "*wherever he wants*". He was

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[2] Many of the more dramatic examples of not using the smartphone for mobile access came from Portugal and Romania, which may in part reflect the difficult economic situation in these countries at the time of the research.

planning to return to an older tariff. Lastly, Vasco's (boy, 11, Portugal) parents had said that his smartphone was mainly to be used for phone calls, that he should not spend much time using it to access the internet or to exchange online messages. In fact, one day he had forgotten the internet was on and when the higher than normal bill came in he received less pocket money because of this. As a result he decided to avoid going online from the device at all, and uses the laptop and free WiFi instead. Even without the experience of a large bill, children like Mathilde (girl, 10-13, Germany) only use the WiFi at home to go online from the smartphone or else they try to use 3G as little as possible if WiFi is not available.

More rarely, some were also able to use the free school WiFi[3], **more commonly they sought out WiFi in public places**. Children like Trine, (girl, 11-13, Denmark) for example, would check to see if access to WiFi was available before she turned on 3G, or else, like Griet, they limited their time online:

Griet: I try to turn it off (3G) most of the time, otherwise it would cost a lot of money. If I want to go on Facebook or Snapchat, I turn it on. But immediately afterwards, I turn it off again.
(girl, 12-13, Belgium)

In other words, children sometimes ration their own use. This is also true for those not on a pay-per-use tariff but who had a tariff with internet access (however measured) up to a certain point. Sometimes their parents had imposed these limits, just as in the past they had imposed limits on how much money their children could spend on traditional mobile phones. Or else they had negotiated a deal whereby their child would pay the extra if they crossed that threshold. While some children admit to going over their limit, more monitor their usage and try to stay below the limit. For example when Alana (girl, 11-13, Romania) receives a message announcing she is about to surpass her internet limit she stops going online from her phone. Meanwhile:

Anuj: I check how much data I have left normally. And then if

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[3] This was only mentioned by some Portuguese and Romanian children, which may reflect their schools access policy. In many UK schools, for example, children are not allowed to access the school wifi from their smartphones (or tablets).

there is WiFi I'll use it but if there isn't I won't mind using my internet, but only if it's somewhere when I really need it. If I don't need to go on my phone for something important then I'll wait till home or later on.
(boy, 11-13, UK)

One common tactic to save money is to switch from texting via the phone to online app alternatives using free WiFi and several also mention using some form of online textual message when abroad because it was cheaper than speaking on the phone. **An alternative strategy to reduce costs lay in the choice of what service to access**. For example, Emile (boy, 14-16, Denmark) would not use YouTube on his smartphone when outl because it "*eats up data*" while Gaia (girl, 14-16 Italy) said the same but specifically about viewing longer videos on the smartphone. Another example of finding cheap alternatives is when Massimo (boy, 14-15, Italy) notes that the mobile version of the newspaper *Republica* requires a subscription, so he goes to the newspaper's homepage instead because it is free. A particular illustration of a 'workaround' (Ito *et al*., 2010) was whenever Paulo (boy, 12, Portugal) was in a shopping centre: if he wants to send a message to a friend, he first checks whether there is free WiFi and sends the message through Facebook, avoiding costs. If there is no WiFi he sends the message by SMS because it is cheaper than activating 3G, going to Facebook, going to Facebook Chat and sending the message via that route.

One further example of how costs influence behaviour is provided by Adrian (boy 11-13, Romania). He never shares his smartphone because his password allowing him to spend money is stored on the device and he has a contract whereby if someone accidentally (or intentionally) downloads items that have to be paid for, he can be charged. Hence he does not want to risk letting other boys use his phone.

As we saw earlier, **some of the motivation to be careful about costs came from bad personal experiences**. For example, Cătălin (boy, 14, Romania) only used the internet for about 10 minutes per day but at first had not known how to shut down apps and his bill had mounted by €10 per day. He was too scared at first to tell his mother but eventually he did and Vodafone let them pay half the bill (€65). When Marius (boy, 11, Romania) had been at his

grandmother's, he had sent messages and watched films unaware of how much it would cost – and had cried when he received a bill of €80 (although his parents subsequently did not tell him off).

In sum, previous research has shown that children were cost conscious about pre-smartphone mobile phones. In research conducted in the UK in 2007 children had been able to access the internet via their mobile using WAP, but in practice they had made limited use of the internet mainly because of cost – those that did use it looked up something quickly and then got offline (Haddon & Vincent, 2009). This 2007 project was commissioned because of concerns even at that time about how use of the mobile phone might give rise to more risks online. Yet in practice there was little risk at that time because of cost barriers to use. Some of that behaviour related to the (pre-paid) pay-per-use tariff arrangements at that time. Although those tariffs still exist, as does the get-in, get-out-fast behaviour, there is a wider range of packages now, especially more flat-rate ones. Nonetheless, this section has demonstrated how costs remain an issue and shape the acquisition and use of smartphones in various ways. Other, older, research across countries had shown that adults are also aware of and influenced by telecom costs (Haddon, 1998). But arguably, **money concerns are more acute for children because of their financial dependence**, meaning limited personal funds as well as parental pressures to be frugal (also suggested by analysis of earlier data from the 2010 EU Kids Online survey: Haddon & Ólafsson, 2014).
Hence money is a major constraint on use and provides one reason to question the potential of children to use portable devices "anytime/anywhere" - for economic (and related social) reasons they do not. It also has a bearing on their perceptions of what is good about smartphones and apps (e.g. when they save money) as well as what is potentially problematic (when there are hidden or unexpected charges).

2.3.2 Time constraints

One of the other limits on using devices "anytime" arises from various social constraints on time availability, in part through social commitments. **One**

derives from regulation in school time, and varies across countries** as well as to some extent between individual schools. As discussed further in a later chapter on school mediation, even in less strict schools there is an understanding that devices cannot be used in lessons when paying attention to teachers, but many other schools ban their use for longer periods, as in some UK schools, especially junior schools up to age 11, where they are not even allowed on the school premises[4] (even if children sometimes break the rules).

Next, again discussed at more length in Chapter 5 on parental mediation, **we have the time constraints imposed by parents**. This can reflect concerns about the general amount of screen time children experience and whether this is perceived as making children less sociable, less physically active, taking time away from homework or more "worthy" pursuits, causing eyestrain or leading their children to have insufficient sleep. These are documented in the EU Kids Online project (Smahel & Wright, 2014), but they were also all mentioned by the Net Children Go Mobile interviewees. Although they sometimes object and try to get around these constraints, **many children also agree with their parents' assessments**. These concerns often lead parents to impose limits on the total amount of time children spend using these devices, or intervene when they perceive that the children have been using them too much (in one session). But sometimes it is the timing of use that is affected, as when children are allowed to use devices only after finishing homework, or not at "family time" like mealtimes[5] or holidays or other times deemed to be special (such as time watching TV together as a family, when there are visitors), or after the children's "official" bedtime.

As regards personal commitments, **even without parental pressure, some children prefer to do their homework first before using devices, including portable ones, for other purposes** – even turning these devices off so that they cannot be disturbed by incoming messages. For certain young

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[4] In the UK, 63% of children are not allowed to use smartphones in school. The fact that for Denmark the figure is only 18% shows the national variation in how smartphone use is regulated, implying different degrees of constraint on use in different countries.
[5] This was the single time most commonly mentioned across countries.

people their after-school activities their hobbies, their sporting interests, etc. take precedence, meaning that in effect they are not using devices, including smartphones, at these times. Or to be more exact, they are not doing tasks that take up blocks of time on these devices. Communication may be another matter, as some children check incoming communications regularly, fitting this in between other activities, but others do not. How many commitments people have depends on the individual, but in general older children were more likely to mention these as reasons for not using the phone at certain times.

Less commonly mentioned, but a reminder of technical limitations, is the **constraint of battery life**. Francisca (girl, 10 Portugal) switches off her smartphone at home to save the battery, while Kristine, below, also rations use outside:

Kristine: In my opinion I use too much battery and I'm really afraid that my phone will cease to work. I also take care of it, so every morning I try to avoid going online with my smartphone and I'm always so glad that the battery is still at 95 percent. And then after school I always think: "No, I'm not going to spend time on the phone again, because the battery should last till the evening". So I try to use my time wisely (laughs) and then switch the WiFi off, and switch it on, only when I want to look up something.
(girl, 13-14, Germany)

If these are temporal constraints, are there **temporal patterns to use**? Quantitative data is better suited to revealing the details of this, but this **qualitative research shows there is certainly a good deal of individual variation**. For example, while many say they use devices more at weekends when freer of school commitments (and school rules), for others the weekend is actually when they have more social commitments, more things that interest them, or more involvement with their families, and so they use portable devices less. In the interviews we also get **glimpses of possible peak times**: for example checking for overnight communications before school, checking for communications when they first get home from school, and checking for communications or listening to music during school breaks (for schools that allow use, or where children simply break the rules). **There is, however, one common "type" of time that is frequently mentioned – using tablets and smartphones when the children are bored!**

Across countries children mention this, especially, but not only, younger, children – for instance on long car journeys or during the school holidays. In this respect, children mentioned checking and sending messages, playing games, listening to music, checking the pictures stored on the device, checking their profiles on Facebook, etc. In other words, the devices can be time-fillers, and quite often for younger children.

Jenna: (The iPhone is) something to entertain you when you're bored. I wouldn't really say it's a great thing in life, but it's just something to entertain you.
(girl, 9-10, UK)

If all the above provides some insight into the temporal patterns of use and non-use, there is also the question of perceptions of time, how young people evaluate the time spent on devices. While many are quite positive, some also recognise how the devices, smartphones especially, can be time-consuming. This does not imply what we elsewhere discuss as "excessive use" (Ito et al., 2010) but occasional comments from children in a variety of countries nevertheless suggest **using smartphones can be seen as "wasting time", a distraction from other things the children could be doing, including school work**.

Nora: Another disadvantage is that it distracts a lot of attention from homework. Instead of doing homework and studying for a test, you prefer spending time on the phone because the phone is always on and you don't notice how much time goes by. You just wanted to look something up quickly but in the end you spend half an hour or more, because you lost yourself somewhere.
(girl, 14, Germany)

Hence, to return to the discussion of constraints on use, some children actually limit their own use of portable devices to go online, not just because they have got better things to do (as in the earlier examples of turning off smartphones when doing homework) but also **because they are themselves wary of using devices too much**, as when Lilya (girl, 11-13 Romania) feels that some of her peers were "*addicted*" to using smartphones and is afraid that she could become like that too. Others, like Stefania below, note how they had overcome this temptation.

Stefania: Initially, when I first had my smartphone, I used to be connected for long periods and as a consequence I did my

homework later and it took me longer, until the evening. Then of course I learned how to self-regulate and this does no longer happen, but it did at first.
(girl, 13, Italy)

2.3.3 Space constraints

If the previous section shows the limit on using portable devices "anytime", this section shows the limits on using them "anywhere". First, however, it is clear that they are used in a wide variety of locations and circumstances, such as when travelling by car, on public transport, even on foot. Some uses do not involve going online, such as listening to music when going to school or walking the dog, taking pictures when on holiday and playing games while in the supermarket or waiting at the doctors. But children also report looking up information, like maps when they are lost, bus timetables and route planners, shop opening hours, Facebook to see if they have already encountered someone they meet face-to-face, looking up things on Google when out with friends and wanting to check something they are discussing, and so on.

That said, the smartphone is not always "at hand" (a theme discussed further in the next chapter), more specifically in certain public spaces where they might be stolen.

Antony: I go to Peckham Bus Station to go to cadets and I never get my phone out there. You'd literally get dragged behind… someone would take it!
(boy, -14-16, UK)

In fact, children across counties, especially younger ones, say they would be **wary of using it in (certain) public spaces**, walking home or on buses, and if they did use it they would do so carefully. In part this reflects parental advice, based on fears that the device would be stolen – including very specific advice about locations, such as not taking smartphones to football practice.

In the UK, the interview with teachers of younger children showed how they went out of their way to warn their students to be careful not to show their smartphones when walking home by listening to music with headphones, for example. This was a

concern based on the fact that a number of these phones had been stolen in the local area. Indeed the police who gave talks at the school advised such caution, partly also because of a concern that children would be less attentive to traffic if listening to music or being otherwise pre-occupied with their phones. **Perhaps it is not surprising, then, that this awareness about use in public spaces was expressed most by the UK children** [6] , while concerns that being distracted in traffic might impinge on their safety was also noted in other countries, such as Romania.

Daniel: If I'm on the bus without my friends and there's a group of people behind me, then I'm wary of how I use it. You won't go through just poking the screen – because that's asking to get your phone stolen.
(boy, 14-16, UK)

If anything, children are even more careful about where they take their tablets, and there are often parental rules about this, more so for younger children but also for older ones. Some children, for example, are not allowed to take tablets out of the house unless accompanied by a parent. Some could take the devices when visiting relatives such as grandparents, or visiting friends – that is, locations where the parents thought it would be safe to use them.

Previous research on mobile phones had shown that they are used less in certain spaces (e.g., theatres during shows; reviewed in Haddon, 2004 and Green & Haddon, 2009). **The same is clearly true for smartphones, as some young people told embarrassing anecdotes about their phones ringing in places like church during a service. Thus, in some places they are not used but are not switched off**.

There are also practicalities affecting the ability to use smartphones (or tablets) to go online. For those who are cost conscious about using the phone's 3G (or who have gone over the limit on their tariff plan), **they do not use their devices to go online where they cannot find a free WiFi signal or where the**

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[6] Smartphone theft is one of the most common forms of "theft from the person" in the UK. Many of the British children interviewed know of someone whose phone had been stolen.

quality of the signal is not so good. This might produce national variations in children's options because there are country differences as regards public WiFi availability. In addition, there are also country differences in the network coverage overall, as some Italian children reported, for example, that they could not get a signal for their smartphones when in the mountains.

Finally, young people also limit their use for social reasons. Pilar (girl, 16, Spain) was one of the children interviewed who **does not check her smartphone when out with friends out of respect for those co-present – that is as a form of etiquette**. Fabio, below, had actually reduced his use when in company as he reflected on this

Fabio: I used to be very attached to Facebook, but after a while I understood that… I mean, I see all my friends that are always on Facebook; they hang out with friends and they are stuck on their phones. That is not real life. It is not good. On Saturday night you go out to have fun and (they are) with his phone in their hands all the time. It is good to use it when you can, not using 24/7.
(boy, 16, Italy)

As we will see in the next chapter, those who are constantly using their smartphones in company can receive complaints about not respecting those around them.

Domestication research has emphasised how new technologies have to find a role in people's lives, which means taking into account the rest of their lives, including pressures on them. If one of those pressures is their economic circumstances, these last two sections underline the time and space issues they face. We saw the concerns of parents, fitting the use of these new technologies into their other activities, and their own perceptions of the implication of using smartphones on their time. Children are aware of, or in some cases have been made to be aware of, the spaces where it is more or less safe to use devices, more practical to use them because of WiFi availability, or spaces and occasions where it might be socially less appropriate to use them.

2.4 Smartphones and tablets finding a place in device ecologies

In general, when new technologies are adopted they do not simply and completely replace the ICTs that people already have. The newer technologies find their place within an ecology of devices (Ito et al., 2010) that people already have, sometimes taking over the role of another device, or partially doing so. And while some existing technologies may be abandoned, they may equally find a more particular or narrower use, as the role has been remediated by the new arrival (Bolter & Grusin, 1999). This is exactly what we find in the case of children's adoption of smartphones and tablets.

The chief advantage of portable devices, mentioned particularly about smartphones, is their 'convenience'. Despite previous observations about constraints on their use, smartphones in particular are often at hand. Even within the home, young people will often speak of pulling them out of their pocket to check something, rather than going to a PC and waiting for it to boot up. **And that also means that smartphones also deliver incoming communications in real time** – children know straightaway when the message arrives and sometimes choose to answer straight away, rather than checking on the PC or laptop at periodic intervals. The second advantage is that **some apps (and especially games) are available only on smartphones**, or else on smartphones and tablets but not on the PC.

However, for some purposes newer portable devices do not displace the older ICTs. **Many children speak of preferring to do their school homework on a PC (rather than the smartphone or tablet), because of its screen size and keyboard**:

Kim: It is just that, on a computer the screen is bigger, and then you have to scroll up and down that much, so you just have it so you easily can see it.
(boy, 14-15, Denmark)

For some it was easier to print from the more established devices, while others noted that the

portable devices were more breakable and more sensitive, less "sturdy". Meanwhile yet others preferred to play games on a PC (or on a games console) because of their faster processing power and higher resolution graphics. Some download material onto a PC (or tablet) because it was quicker than doing it their smartphone, or else watched YouTube on a PC, once again because of the larger image. Occasionally the preference was for more obscure reasons as when Collin (boy, 14-16, Ireland) points that if you delete videos on a laptop you could restore them, but you could not do this on a smartphone. Or Frederica (girl, 9-10, Italy) has a particular taste for detective games, available for the PC but not the smartphone, although Răzvan (boy, 11-13, Romania) notes that while more games on the tablet are accessible, those on the PC are more advanced. **But for whatever reason, it was clear how older devices have certain features, certain affordances that continue to make them attractive for certain purposes**. And related discussions arise as children explain why they prefer tablets to smartphones, or vice versa.

However, we cannot just compare the affordances of PCs, smartphones, or any other devices, in the abstract, since much depends on the nature of devices in specific households. In some homes old PCs or laptops that run at slower speeds may be more likely abandoned. **But smartphones (and certain brands, and within brands particular models) also vary, in their features, in their capacities. Moreover, their age sometimes has a bearing on what they can do and how quickly**. For example, in the UK, where BlackBerries had, at one stage, been at one stage popular among children, there were discussions of the limited number of apps compared to the iPhone or the fact that it was more of a hassle to use WhatsApp on the BlackBerry. Children sometimes explained how their particular smartphone could not download some apps, or even certain games. Or else particular tablets or smartphones have very limited memory, or are simply slower than those of peers, or the WiFi connection is poor.

Older and newer devices are used in conjunction for certain purposes – for example, downloading something from the quicker PC and transferring it to the smartphone, or taking pictures or videos on the smartphone or tablet but then saving them on the PC to save the more limited memory on the portable devices. **At times the choice of what to use is conditional** – one might watch a video on the smartphone, but only if WiFi is available, otherwise it is too expensive; if the PC is already switched on, and does not need to boot up, it may be used for some purposes where often the smartphone is used. Or else, the choice is forced when one device is unavailable – for example, using the PC or laptop when the portable devices are on charge – with Ellie (girl, 11-13, Ireland) noting that because she has been listening to music on the way home on the iPod, the battery needs charging and hence she switches to the laptop.

Sometimes devices that are already established in the home have a certain inertia because young people have invested effort in them. For example, Bianca (girl, 14-15 Italy) used her iPod more than her smartphone because she had already spent time downloading games onto it (and a similar rationale was sometimes used for explaining why some children stuck to playing games on their consoles rather than the new devices). John (boy, 9-10, UK) also prefers his console to the tablets because he had got into the habit of playing with his thumbs. And Giuliana (girl, 12-13, Italy) explains that she does not bother with Instagram because she already had many apps with which she could communicate, also noted by Ea:

Ea: I cannot see why/how I should use the others (Snapchat, Instagram) when I have Facebook to do all that.
(girl, 11-13, Denmark)

Social considerations, not just technological affordances and inertia, also play a role. Parental restrictions themselves can influence the choice of which device to use. For example, Benedetta's (girl, 9-10, Italy) mother does not allow her to use WhatsApp. Fletcher (boy, 9-10 ,UK) is rationed to using his PlayStation on certain days, and hence switches to the tablet on other days to look up background information about his games. **And in some homes the device that was owned was preferable to the device that was shared**:

Lena: The Smartphone is mine and the tablet is not and so I can do more with my smartphone, I can do what I want. Because the tablet is for my father's work, I simply can't do

some things.
(girl, 9, Germany)

Peers also play a part. Before WhatsApp became fashionable Daniel (boy, 14-16, UK) notes how BlackBerry Messenger (BBM) was popular among his peers and without it he had felt out of touch with what was happening – hence the pressure to get a BlackBerry.

The areas that children (or adults) felt to be potentially problematic (Smahel & Wright, 2014) could also have a bearing on the choice of device. Some children feel that the smartphone attracts less (annoying) pop-ups than going online via the PC, although others thought it was the other way round. One Spanish focus group thought that it was easier to access pornography on smartphones because of its greater privacy: *"The smartphone is more your own than a PC. You can put a password on it and only you can use it."* (boys, 14-16, Spain). Davide (boy, 14-16, Italy), explains that he stopped using the PC when he was supposed to go to sleep and switched to using the portable PlayStation because it was easier to hide in bed at night, Alessia (girl, 12-13, Italy) thinks that WhatsApp on the smartphone is safer than Facebook because you only add people who are already on your contact list. Gaia (girl, 14-15, Italy) thinks that Snapchat on the smartphone is safer for conveying embarrassing pictures, while Anuj similarly prefers Snapchat pictures sent to his iPhone because has parents might not have the same sense of humour as his peers:

Anuj: So let's just say you share a computer with your Mom or any person and then you get a message, like a silly face….you don't want everyone using that laptop to see that photo.
(boy, 11-13, UK)

Some of the above comments showed that there was not only an ecology of devices but also of different communications channels, where the arrival of some new ones had implications for the use of others. Anuj (boy, 11-13, UK) notes that many of his friends had switched to WhatsApp because unlike Facebook there was no lower age limit to use it, while Massimo points out how among his social circles Facebook had been remediated to a narrower role by the take up of WhatsApp

Massimo: (WhatsApp) is used for... strengthening relationships within the class… I mean, you make jokes on WhatsApp. While on Facebook, it is for more important announcements
(boy, 14-15, Italy).

In this last section we have seen another layer of the domestication processes, fitting new technologies like the smartphone into the existing ecology of devices and the communications repertoire already available to children. Once again, and in keeping with previous studies of technology adoption, it is by no means a straightforward process of new displacing old, but the technological affordances offered by different devices, the role of inertia in using some devices and even contingency (in terms of whether a device happens to be turned on, for example) can have a bearing on the ever more complex device and communications choices that children make every day.

2.5 Evolution of use

Gitte Stald

When we dip into the individual children's narratives about their mobile devices it is equally evident that the children go through quite a complex process of achieving access, choosing, adapting, and evaluating when they integrate the mobile devices and new services in their everyday life. It is not a simple matter of getting to own a specific technology and being persuaded by trends among peers to adopt new apps and programs. To use terminology from evolution theory, it is, in fact, a matter of the survival of the strongest options. Our data indicate that, despite the collective experiences and preferences, what the strongest options are may differ from one child to another according to age, gender, background and interests.

So, when we look at the different age groups and also listen to their own narratives about evolution of access, uses and interests we find quite different stories about **changing access to and preferences for technologies or services** over time.

Many of the children, we have interviewed mention

the significance of age. Interests, needs, and uses change as the child grows up. But the changes are not the same for everyone. Emma, a 14-year-old girl from Ireland for example says that she used to play games a lot, but she doesn't anymore, as she has grown out of it. Getting older and growing up means different management of time, new interests, and new reflexivity. Quite clearly certain overall activities, like gaming, but also the interest in very specific games are connected to a certain age, a certain time in life. A 15-year-old Danish girl, Emilie, says:

Emilie: That was the only thing I used Facebook for in 4th grade, it was playing stuff like Pet Soc.
(girl,15 , Denmark)

Now she uses Facebook and other social media much more and for more diverse purposes, because her social network, and in general her life-world, has expanded. Playing a particular game like Pet Soc or doing other specific activities is clearly perceived as something that belongs to a certain age group. With increasing age children are getting more freedom to choose and use.

In some cases the **meaning of age in combination with usability also influences the choices between specific programs** in rather non-reflected ways. Getting to know a new option may outcompete the otherwise overarching popular services. A group of 10 to 11 year-old boys in Denmark discuss which social media they prefer:

Emil: No. I don't use it (Facebook) anymore because they… I have gotten a program called Instagram
Noah: Yes, I have that too … I use that a lot more.
(boys, 10-11, Denmark)

Sometimes the changing patterns of use surprise the young users themselves. Where many claim that they use their smartphones increasingly much more for various purposes, a 14-year-old Italian boy, Fabio:

Fabio: I used to be like that until a few months ago, I continuously checked my phone, but lately I noticed I am checking it very seldom, just when I hear a notification so I use it less. I don't know why. Up to a few months ago at 5 pm I had already consumed all the battery, while lately it works until 11 pm. So this means I am using it less.
(boy, 14, Italy)

Some parents have a different view on children's changing and declining patterns of use, as in this mother from Romania.

Dora: But you know what… the younger children will receive their smartphones earlier.
Interviewer: Why?
Dora: I will tell you why: I bought them smartphones when they were older, and, to my surprise, they got bored very fast; …they don't press those phone buttons anymore. So, I will buy the phones sooner, so that by the time they start school, they will be fed up with their phones, so I won't have the problem with my children pressing the buttons all the time.
(mother, Romania)

Arguments about "usefulness" and "easiness based on experience" often underline the processes of adaptation of technologies and services and programs. From the outside it may look very random and highly influenced by peer preferences and activities, but delving into thoughts about how useful certain options are and how easy they are to use reveals interestingly diverse views. This is the case with a 12-year-old Danish boy, Emil who says that before he got a smartphone he used to call – he didn't text because he found it really troublesome. It was faster and easier and more direct to call and chat quickly. He says that Bluetooth used to be a good way to send things but now he doesn't even turn it on because communication has become so much easier with Facebook and WhatsApp on his smartphone.

Fletcher, a 10-year-old British boy says that he prefers one platform over another for usability reasons. He previously used the games console a lot but got a tablet and tried that out but he still prefers the console because he found out that: "*It's much easier on the console.*" He even shows the interviewer which moves and actions are easier.

So, some children stick to the old, well-proven technologies. Sometimes they have changed to new, smart tech but remember technologies fondly and with some degree of nostalgia. A 15-year-old Romanian girl, Sabina, says that she used to play on an old Nokia, big as a brick. She was looking for games, and she didn't know how to push those buttons, but she liked it a lot and she remembers it even now. Others recount for their acquisition of their first mobile which is clearly vividly remembered as a

changing factor, and which has an impact on encounters with new acquisitions that follow.

Perhaps the assumption that young Europeans are keenly interested in all new communication technologies is contested by some of the narratives that we have collected. For , a 12-year-old Romanian girl, Oana, replies to the question of what her smart phone changed for her saying that it did not change much. She used to play on the computer, but now she plays on her phone – except for playing on another platform, there are not many changes. Adults may find that the change from a traditional computer to a smartphone indicates major changes in many ways, but this girl does not perceive a radical change. Her everyday life with media goes on as usual, in her experience.

Comments based on experience sometimes refer to technological experience: **some children compare technical affordances of various kinds and use them as arguments for choosing one technology over another**. One example of this is a 10-year-old Danish boy, Nicolas, who comments on the differences between iOS and Android:

Nicolas: It's just that my old HTC couldn't do as much as the iPhone, I mean the iPhone has a better operating system.
(boy, 10, Denmark)

External factors also have an impact on children's choices and uses over time. A quite unique example comes from a 10-year-old Irish boy, Conor, who used to play a lot on his games console - whole days sometimes. He used to live in a very bad area, so he could not go out and had to stay at home - his mother thought staying at home was safer than going out. Now that they have moved to a new place, he can go out and ride his bike every day after school, so he is not grounded inside, with his games. In this case it was not a question of being able to take his media with him when he was out and about, but that any outdoor activity was considered to be too dangerous. A change in his life situation hence changed his media use.

Other examples of external factors are stories about change of regulation of use, especially in schools. Two 15-year-old-girls from Belgium explains:

Julie: We're not allowed to use mobile phones in the school building, and also not during the courses.
Camille: Yes, I think that's the only rule. However… no, you're not allowed anymore to take pictures. On the playground, you can't take pictures anymore. Last year, this was still allowed. But it's now banned because of these selfies, I believe.
Julie: And in the classroom it's not allowed. Just very occasionally, when we have to search for something. But this only happens very rarely.
 (girls, 15, Denmark)

So media use changed over time due to changing regulations, which was again the result of the school's evaluation of actions and consequences. Some children experience the opposite situation, however, such as 15-year-old John, a British boy says:,:

John: Actually it depends. On the playground it's allowed now [using smartphones]. Since this year, you can listen to music with your earphones. So…it's not really mobile…not internet. But yeah, previously this was not allowed, and now it is. In the corridors, it depends. If you cross for example teacher A, and you have your mobile in your hand, he would confiscate it. But, if you would for example cross teacher B, he wouldn't reprimand you. So yeah, actually it depends on who you encounter.
(boy, 15, UK)

Another variation of the change of regulation factor is changing parental behaviour. Two 14-year-old girls from Belgium say:

Jolien: My parents used to give me advice, but now I think they realize that we're responsible enough. When you just have these things, like when you're 12, then they intervened more, but now not anymore.
Catherine: Now they still tell while you're studying, you have to put your mobile aside, so you're not distracted.
(girls, 14, Belgium)

These are just two examples of the consequences of changes in terms of basic parental rules for acquisition and use: restrictions become fewer with age when children grow up but at the same time growing older means that life becomes a serious business. So some children actually experience a stronger awareness about time use and purposes for use. Twelve-year-old Aoife from Ireland says that before she used to play games on her computer for hours, but now she cannot do it anymore because of time restrictions. Schoolwork is mentioned as motivation both from parental regulations and for

children's own control of time use on specific activities. Some children talk about their own changes in behaviour as a consequence of growing demands on them, and also in order to avoid restrictions. Over time they become experienced in how to behave and how to manage their media in a way that does not compromise their access to primarily their smart phones: Nida, from Germany (14), is only allowed to use her smartphone after 6pm on a weekday, but her parents have forgotten about the time limit. When Nida misbehaved in the past her parents used to take away her Smartphone, but she changed her behaviour so they do not take it away anymore.

An interesting **argument for achieving new technologies and for building new habits is the impact of breaking technologies/devices**. Sada (13) from Germany now owns her fifth smartphone. She got it because the one before was broken. She did not have to buy it herself before, but because her actual smartphone is broken too, she has to pay for the repair herself. So getting better – and more expensive – technologies as you grow older is followed by more responsibility. Another example is 11-year-old Bianca from Romania who used to go on Facebook from her iPod, but it broke and the WiFi stopped working because she left it on for too long; now she has got a tablet with the Facebook app.

Getting better technologies also seems to be a matter of taking the opportunity to get better quality devices when you get older. A 15-year-old British boy says that his cheap laptop used to break. He now uses the smartphone more. But breaking technologies does not automatically lead to new purchases. A 12-year-old girl from Italy says:

Alessia: I used to have a Galaxy Turbo first, then when I had broken the galaxy, my dad had an iPhone he didn't use so he gave it to me.
(girl, 12, Italy)

Sometimes breaking technologies urges the child to be creative, as in the case of nine-year-old, Angela (girl, UK), who listens to music via her tablet on YouTube. Before her headphones broke, she used to listen to music on a PC.

So, the lives of young Europeans are changing in various ways and for various reasons, and media uses are changing in accordance.

2.6 Conclusions

This chapter has, in several ways, enabled a more nuanced understanding of the adoption and use than appears in the quantitative study conducted by Net Children Go Mobile (Mascheroni & Ólafsson, 2014). Reflecting previous studies using the domestication framework, it is clear that children experience smartphones and tablets at a younger age than ownership figures show and that the integration of these devices in their lives is a process. Indeed, many processes shape the age of ownership, but it is clearer which ones fix the age of acquisition and which are more flexible. Moreover, while ownership is an important moment that gives children relatively more control over these devices, there are still processes of sharing technologies within the household. And while there are a variety of factors leading to the ownership of smartphones in particular, the demand does not always come from the children, and children can be sophisticated consumers when evaluating these devices.

The discussion of costs, time constraints and spatial factors affecting the use of devices show the social factors that undermine the claims that their use can be anytime/anywhere. In practice this is often not the case. There is evidence that this not the case for adults either (Green & Haddon, 2009), but young people are even more constrained by their financial dependence and the regulation of their use by adults such as parents and teachers.

Finally, it is clear how smartphones and tablets have to fit into a ecology of devices that children already have access to, and the new devices do not simply replace the old ones – the picture is far more complex. Nor does usage of mobile devices remain static, but it is clear that a variety of factors have a bearing upon the way usage evolves. Moreover, this means not just even broader use of these devices (although for many children this is the case - see Mascheroni & Ólafsson, 2014) but also that sometimes children reduce certain patterns of use and change from one pattern to another.

3 Changes and consequences of smartphones and tablets

3.1 Introduction

Giovanna Mascheroni

Finding a place for new media in the context of individuals and groups' everyday practices and relationships (Haddon, 2004) involves making them meaningful, and is also based on their prior experiences with digital media. As a consequence, in reflecting on how mobile devices have become familiar and have acquired a permanent place in their lives, children frame the domestication process in terms of continuities as well as changes.

Children's narratives of the changes associated with smartphones and tablets focus on the following areas:

- The emergence of **new**, or the reconfiguration of **everyday practices**: new online activities, but also changing experiences of time and space.

- **Changing communication practices within the peer group**: mobile devices broaden the choice of services and platforms for mobile communication that are shaping and shaped by peer group's sociability.

- **Changing communication in families**: mobile devices are appropriated into the family context and bring along changes in the family's communication, relationships and power-relations, at times becoming sources of conflict or resources for shared leisure time.

Along with children, adults' discourses also frame smartphones and tablets in terms of both positive and negative changes in children's lives.

This chapter examines and compares children's,

parents' and teachers' perceptions, attitudes, opinions and experiences in order to understand:

- what changes are associated with the use of smartphones and tablets in the different contexts that children inhabit in their daily lives;

- whether these changes are framed positively - as opportunities and beneficial outcomes of new devices - or negatively - as problematic consequences that both children and adults distinguish from online risks. (Risky and harmful experiences of mobile internet, however, are examined in more depth in Chapter 4).

3.2 Emerging practices

Jane Vincent

Even during the course of this study the use of smartphones, tablets and laptops by children aged 9–16 has grown apace, as has the use of new social media such as Snapchat, Twitter, Tumblr, WhatsApp, messaging between mobiles, gaming and the popularity of following celebrities and "YouTubers". This growth partly displaces other services that have fallen out of favour in some countries such as ask.fm or Facebook. However, in line with the point about a media ecology in Section 2.4 earlier, rarely are the less used SNSs discarded completely; instead, they are maintained for contacts with people who would otherwise be lost.

Respondents in our interviews and focus groups highlight how they are constantly connected via their mobile device. Many of the new communications and viewing practices form the foundations for friendships and connectedness amongst children and their families, as well as enabling them to explore and develop life skills; some, however, do rue the loss of face-to-face contact and real conversations, as well as the emotional impact on their interlocutors who they do not see.

Federica: Since they don't see the others in front of them, since they are not face to face, they have a hard time understanding who are the others, they have a hard time understanding what effects what they say have on the

others… Like what she was saying before, there are kids who profoundly upset their peers without even perceiving this because the level of empathy has dramatically decreased'
(Youth worker, Italy)

While it is inevitable that emerging practices will be influenced by new technologies, with content being promoted by industry, often with favourable upgrade terms and tariffs, it is the ways that smartphones and tablets are being appropriated and used that leads to the reconfiguration of everyday activities such as use of free time, managing relationships and maintaining and developing identities. It is also not surprising that it is the adults who comment most on their observed changing practices of children arising out their voracious appetite for smartphones and (wireless) internet access.

3.2.1 Reconfiguring everyday practices

In this section some of the key points that are shaping the reconfiguration of everyday practices of children are highlighted, especially those that emerge from using and learning about smartphones and mobile internet applications that bring the private, backstage (Goffman, 1959) behaviours into the public space. Safety online, parental mediation and smartphone and tablet use in schools are covered in detail in later chapters but are also discussed here as they frame the changing practices being explored.

Keeping children safe online is now much more manageable with parental controls, blocking and tracking apps and software now readily available and children are embracing the opportunities these afford them. The use of geolocation for tracking and checking on children is not widespread, but location services are beginning to be used for checking your children are safe, as in this example given by Erica, when talking about having her phone with her at school.

Erica: I don't keep it [my phone] switched off because my parents have Find My Friends on there so that can track where I am so they're never afraid of me getting kidnapped or getting lost anywhere. I keep it on silent though so it won't bother anyone in Chapel or in lessons.
(girl, 12, UK)

Instruction about online safety is left largely to schools throughout the countries studied, with opportunities for parent meetings and online and peer advice also prevalent. **The changing technological landscape does, however, present problems for parents who are trying to be even handed with all their children, and who find it hard to introduce parental controls into households where there were none for older children. This has led to mixed use of parental control software** and some families have dispensed with it in favour of WiFi limits, monitoring or trust. This is because they find it so difficult to set it up in a way that does not require them to become IT managers or it prevents them from doing their regular household shopping. Typically parents will check their children's smartphones to make sure they are using them appropriately:

Sarah: *parents sometimes got angry because they discovered that she used bad words or that she published pictures that they believe were not decent.*
(girl, 15, Italy)

As will be seen in later chapters, there is more **proactive management of bullying** by parents and teachers. Children and adults are now **managing cyberbullying via SNSs as well as via the banning of mobile devices and advice and management procedures in schools**. Bobby, from the 9-10 boys focus group in Ireland, tells of their school process that is typical for many younger respondents

Bobby: We have a cyberbullying programme here when the senior pupils talked to us, how to be safe on line, but I don't have a social networking profile: I don't think I need it but it's good to know.
(boys, 9-10, Ireland)

Furthermore, the easy access to data records such as screenshots from Snapchat, Twitter feeds and other SNS records, can **empower children to take action for themselves, and providing their parents or teachers with evidence** to do so. Three girls from the UK discuss how screenshots on Snapchat work.

Rosemary: It also only lasts for up to ten seconds.
Sophie: But you can screenshot it.
Rosemary: You can't screenshot it because you've got to hold it down.
Elizabeth: But if you screenshot the new updated one, it tells the person that's taking a Snapchat that you have screenshot their Snapchat.

(girls, 11-13, UK)

Despite attempts to ban them in schools, mobiles and smartphones are increasingly used, and teachers find that parents are drawn into playground disputes via text messages or phone calls with children seeking help with an argument, thereby limiting the authority of those in charge at the school who now have to deal with the "absent present" interlocutors.

Beattie: I had dealings with a couple of students where one person in particular, one student, who was in year 8 actually, had numbers of some her peer's parents and they would phone her and she would phone them and then it would escalate and this one was saying that about this one.
(Teacher, Secondary School, UK)

Although dealt with in more depth later in Chapter 6, the challenge of keeping mobile phones and smartphones out of classrooms has all but defeated many schools that set their own policies for when and where mobiles and smartphones can be used. A UK secondary school teacher, Alex, explains that her school has not quite reached the situation experienced by some fellow staff in their previous schools:

Alex: We've got quite a few new teachers from Ireland and Australia, and one of the Australian teachers was saying to me that, in the end, their school was so big, it was over 2,000 pupils, they said, we more or less have given up on it. We just couldn't fight the battle of phones in lessons anymore, it was just too difficult.
(Teacher, secondary school, UK)

The avid use of smartphones and tablets does, however, mean that children are perhaps more likely to have them with them at all times (even "on silent" at school), providing temptation to access it at inappropriate times or, as discussed later it becomes an emotional prop for all ranges of shared positive and negative experiences.

Using Privacy Settings

The increasing use of social networks in particular, has meant that **as children become more social media-savvy, they become very aware of the dangers that using the mobile internet and public messaging services present**. Privacy settings are often automatically set to public and require the

user to learn how to reset to private, to set up permissions and be available to approve requests to see their account.

Imogen: So my Facebook has my birthday but I don't have where I go to school, where I live, my phone number or anything like that on there, and I don't have any of that stuff on Instagram or Twitter either, so I… the thing… some of the things that I do are public but none of my personal details are.
(girl, 16, UK)

Collective strategies have developed for managing their personal and peer group response to possible intrusions but sometimes even these are at risk such as when passwords are typed in on smartphones or tablets in public places. Elena, a 10-year-old Italian girl, has had her email account hacked, and the other girls believe it happened because of using her tablet at school:

Federica: it is impossible for them to steal your password, perhaps he has seen what you were typing over your shoulder
Benedetta: ….and has seen your password
Federica: if one steals your contact [password], let's assume my contact is "Fede 304" and from my back … they type "Fede 304" and they send it to people they are not supposed to
(girls, 9-10, Italy)

School teachers who use information they have found about pupils or their school on Twitter or Facebook in school assemblies have a particularly strong impact on children's understanding of privacy on line. "*So everyone then got really worried and put their accounts on private for a while.*" (Imogen, girl, 16, UK). However, the practicalities of managing, for example, a private Twitter account means that children are more likely to moderate their personal data rather that deal with the inconvenience of staying private. In general children and their school teachers are much more careful now of maintaining their privacy, not least because of safety campaigns and "stranger danger" warnings.

While communicating with strangers has always been a risk for internet users, **the ability to now access online websites, games forums, and SNSs via a smartphone or tablet from any mobile or fixed location brings with it an extra dimension of risk**. The presence of **fake accounts** is a case in point,

particularly on apps most likely to be accessed from a smartphone or tablet, such as Twitter: The fact that children are aware of "fake accounts" online is a positive outcome of prior policy and awareness campaigns such as Safer Internet Day.

3.2.2 Managing dependency and accessibility

The way WiFi has enabled smartphones and tablets to connect to the internet, often for free, has changed considerably how, where and for how long children can use mobile internet. **In general, the new practices that emerge from the widespread availability of free WiFi at home and in public spaces are enriching the lives of many respondents**. They like to feel always connected with their friends, and to be able to instantly manage situations by searching the web, asking friends and family for advice, and generally using the internet in a proactive way. As discussed in Chapter 4, this might, however, be leading to an overdependence on using the smartphone for some who find separation from the communications and information they receive in regular updates via their smartphone more than they can bear: as illustrated by this conversation with 15- and 16-year-old girls, Bea and Elsa:

Interviewer: Do you think, Bea, that now, when you're sitting here without your phone because you're talking to me, when you go back and pick it up again are you going to feel you've missed out on something because you haven't been able to follow it?
Bea: I don't think like an hour would make that much difference to me...
Elsa: What about a week?
Bea: A week, oh gosh, I'd die, I couldn't live with that.
Elsa: Really, wow.
Bea: Well, I could do it, obviously, like it would take if I go on holiday I always… and they don't have WiFi - I can't remember the last time we did that - anyway I would always be looking for free WiFi, cafés and stuff.
(girls, 14-16, UK)

In this instance the knowledge that free WiFi is available somewhere is important for Bea, who is so desperate to stay in touch via her smartphone apps, that she seeks out WiFi when on holiday. Children also recognise that the mobile phone can be a distraction at school, such as in this example from Spain:

Ana: And you notice the difference between when you study with your mobile, and when you leave it somewhere else. You concentrate a lot more, because if it buzzes or rings and you pick it up to see what it is and then you spend another half an hour looking at it.
(girl, 14-16, Spain)

3.2.3 Using smartphones for exploring identity

Children, and teens in particular, use their smartphones and mobile internet to assist in the process of exploring who they are, who their friends are and in the general process of growing up. There are many who constantly follow the YouTubers and Vloggers who blog their day-to-day family life or provide make-up, hair and fashion advice, or they may be fans of online football teams and leagues. Whilst they will also follow celebrities it is the ordinary people who have become celebrities as a result of their Vlogging who appear to attract both boys and girls alike.

Self awareness of image is not an entirely positive outcome of mobile internet use being ever present everywhere. Respondents refer to ask.fm, Tumblr and other sites where girls in particular are subject to criticism of their looks. This has led to girls editing their profile pictures on social media and to issues of body image generally becoming highlighted, as Bea and Elsa explain:

Bea: There's this girl in Year 9 she's like 13, 14, anyway, on these social network sites…. oh, my gosh, I'll have to show you after…. she looks about 30 and she's so provocative with her photos and boobs out, bums out, belly out everything out ….and all these boys who she doesn't even know will be coming to her, 'Oh, you're so pretty'. If you see her in real life she's like … She's got straight hair. She's not ugly, but she's just a normal looking person you wouldn't see her on the street and go you're so pretty but it's, so it's like and it's just so different and it's just like a, yes, it is a fake identity.
Elsa: And as we were saying how they edit them [images] so what the people do they just literally cut out pieces of their legs to make it look they have it, but I don't get it what's so amazing about a thigh gap, like what the hell
(girls, 14-16, UK)

Teens who are alarmed at the increase in anorexia among their peers do blame social media and easier access to the internet, enhanced by mobile devices, as part of the problem.

Parents, too, are alarmed at the effects of smartphones on the self image of children:

Kim: Because there is also the whole thing with … narcissism. With taking pictures of themselves [Mimics the sound of the shutter on a camera] and…
Heidi: Yes, but teenagers have always done that. Here in the house anyway.
Interviewer: Yes.
Kim: Yes, but it has … not in the same heavy way. People have never taken a camera to take pictures of themselves. It has happened with the phone.'
(Parents, girl, 15, Denmark)

3.2.4 Perpetuating apathy

For some children the "always on" availability of 24/7 information feeds becomes a perpetual circle of tedious non-activity as they scroll through SNSs finding nothing for them or nothing new, but looking again and again just in case they have missed something:

Isleen: I get to the point where I'm kind of like, I get so bored, sometimes I just pick it [smartphone] up and look at it and I have nothing. Or I'll go onto Instagram, come out of it, go on Twitter, come out of it, go on Snapchat and come out of it, and just keep going in the circuit and I'll not realise I'm doing it, because I've got nothing to do. So now I actually downloaded a game again the other day, so I've just been playing that recently.
(girls, 14-16, UK)

As discussed in the previous chapter, using the phone to fill moments of boredom has been noted in past studies (Haddon & Vincent, 2009). Now, the smartphone offers multiple opportunities for entertainment beyond searching SNSs. It does appear to fill awkward uncomfortable, "can't be bothered" and "not interested in anything" moments experienced by children. This ennui can lead to laziness as admitted by the same teenager, Isleen (15) interviewed in the UK with her sister Teema (14); they discuss how she uses the house phone to get family members to talk to her when she is in her bedroom and cannot be bothered to get up or leave her room:

Teema: We'll be in separate rooms and we'll tweet each other.
Isleen: Or call each other because you can't be bothered to get up.
Teema: No, you call me.
Isleen: Yes, or I Facetime, because like I'll call my house phone - if no-one answers [Facetime]- I'll call my house phone and make someone get up and talk to me
Interviewer: Is this when you are in your room?
Isleen: Yes.
Teema: Really?
Isleen: Yes.
Teema: That's really bad.
Isleen: And then I call, I just call them to find out if they're there; I can't' be bothered to get up and see
Teema: That's lazy.
Isleen: I know.
Interviewer: So what's the response to that? From the person who answers?
Isleen: Well to be honest my Mum is always like oh it's pointless just calling, just come down. But then sometimes she does it to me, or she calls and expects us to come to her so she can talk to us.
(girls, 14-15, UK)

And Nida in Germany also gives an example of communicating with her parents by text on her phone, even though they are in the same house.

Nida: Well, my parents have WhatsApp. Sometimes when I want something from them I text them via WhatsApp, for example if the dinner is already prepared or something like that.
Interviewer: When you're at home or…
Nida: Yes, when I am upstairs and my parents are downstairs.
(girl, 14, Germany)

Changing sociability

Both parents and children are now thinking about the changing nature of sociability that has come about because of mobile devices – and there is an argument that the mobile internet has exacerbated this, not least because of the widespread availability of WiFi and 3/4G technologies that enable it. The effects of having this ability to connect to the internet almost at will results in changing behaviours and new practices. As noted in Chapter 2, one of these **is constantly looking at the phone and not attending to other things that are around you**.

Elsa: People still meet up, but yes, I think it stops face to face

communication which you need … because social interaction is becoming so, it's disappearing I think. Some people I talk to can just be so, lack social interaction because they're so used to being just on their phones so, yes.'
(girl, 15, UK)

Children and their parents comment that time is now filled with looking at a screen, playing on the iPad, rather than playing outside or talking. This is described by a 9 to 10-year old girl from Denmark, Laura, who mentions some boys from her class who like to be outside and play, and how they sometimes ask other boys from the class ask if they want to join in, but they don't because they would rather sit and play on their phones.

For some children, unless checked, it would be all the time, as Sally, the mother of two boys aged 7 and 10, describes:

Sally: All the time, if I say that you've had enough on the Playstation, they will go and pick up an iPad. If I say, you've had enough on the iPad and the Playstation, they'll go and find a laptop, and then I end up saying, no, it's just no screens whatsoever, no screen, nothing with a screen.
(Mother, boys 10, 7, UK)

This constant connectivity with the device and its association with almost everything children do highlight how the smartphone could now be seen to be an extension of their identity. Vincent (2013) has suggested that the relationship with the mobile phone is so close that is has become like a social robot – the smartphone has become so fully integrated into the social wellbeing of the user that it is almost a part of who they are.

Cornelia: children don't have personalities anymore, they are mere extensions of the devices which replace everything; she had a conversation with her girl last night who is rebelling as she has no access to Facebook
(teacher and youth worker, Romania)

Many children grasp their phone in their hand, they take it to bed, they use it in places such as in school where is it against the rules to use it, and they flout their parents guidance and mediation regarding its use in their bedrooms, at night and in places where it is not appropriate, such as during meals or on a night out with the family:

Isleen: I think our generation has just grown up to have a phone in their hand
(girls, 14-15, UK).

Alessandro: my daughter had a birthday party at home, they were 29 (...) the picture was the following: boys were dancing – it was kids aged 12-17 – the girls instead were with their phones in their hand, they danced with their phone in their hands, they didn't leave the phone for a second, I guess they also brought it to the bathroom!
(Father, 14-16, Italy)

The availability of WiFi means that other devices such as the iPod Touch or tablets are used to access social networks and perhaps the smartphone in itself may become supplanted by other devices (less emotionally and financially expensive to lose).

3.2.5 Temporal and Spatial changes

It is clear from the ways that children use their smartphones in particular, that there is less separation of school and home life as **conversations (verbal or textual) between children during the day continue when they are separated at the end of the day en route home and then during the evening and into the night. While this is not a new practice, it appears the multiple means of simultaneous communication has intensified this contact**. It is not only one to one voice calls, text or messaging chat, but group chat on social media running in parallel, as well as checking on Twitter, Snapchat and WhatsApp for new messages and updates.

Rula, Helen and Deirdre talked about how the new technology allows their children to talk much more to family and friends overseas now they can use FaceTime. However, the children do not think about distance or time, and new social arrangements are emerging as a result of the new technologies, as in the case of boys who may have lingered in bed or not talked to friends early on a Sunday who now get up before 8am to play online games, keeping a conversation going in parallel on their smartphones or tablets.

Helen: At ten to eight on a Sunday morning. They're there and they're talking to each other.
Deirdre: Yes, they're talking to each other FaceTiming, so it's

a different social set-up, because they can actually, there is face-to-face contact, it's just that it happens to be through ICT, which is just mind-boggling for us, where we all go, why can't you just be around a table?...   And, my children also have a very different relationship with my family now, because of technology.
Interviewer: Because, they're not in the UK?
Deirdre: Because they're not in the UK, but they FaceTime their aunts and uncles, and talk face to face, and I don't even know that they're doing that, unless I see it come up on my iPad, I don't even realise they're busy FaceTiming my mother or my brother.
Rula: Whether it's friends or family, you don't know, unless you're watching constantly, so one of my sons was saying, I was talking to Jack, and Jack's the cousin in Canada. I was talking to Jack about this Cornish Festival and he went, it would be great if we just go there for the Friday. What!?
(mothers, 14-16, UK)

Children's spatial awareness of the distance between locations is not a barrier to continued communication and it is only time-zones that have an impact on when they can talk to each other. Parents may say "wait until you get home to find out if friends are free" but children simply message them wherever they are at that moment, which is made easier by smartphones.

The emerging widespread use of computer games by boys of all ages, but younger children in particular, is providing some challenging issues for children and their parents. **The children play games using multiple, increasingly mobile, devices in addition to a games console**, for example an iPod Touch to FaceTime a friend at the same time as talking to others online. Janie, a British mother of boys aged 10 and 9 says when talking about Minecraft: "*It's very clever, and I can see why they're so animated with this, and most of it is very safe*". Her sons are typical of their age group and will play using tablets to augment the experience.

Janie: Minecraft on YouTube, lots of the kids do little, their own little Minecraft videos. In fact, Alex, does them all the time on the iPad, recording him going, now, you just knock down this tree and then...and it goes on and on and on, and they post them on YouTube. We won't let Alex do that, but a lot of his friends do.
(Mother, boys 9-10, UK)

3.3 Changing communication with peers

Giovanna Mascheroni

Smartphones, and to a minor extent, tablets, have widened children's communication repertoires by extending the opportunities to access already popular social media tools such as Facebook, while supporting new apps such as WhatsApp, Instagram and Snapchat. Reflecting on these changes and their own experiences, and consistently with survey data (Mascheroni & Ólafsson, 2014),[7] children associate new mobile devices with a rise in the volume of peer communication. Moreover, they also identify a number of consequences of smartphones and new communications services on the quality of peer communication. While beneficial outcomes are perceived as highly significant and prevalent, more problematic consequences of the widespread adoption of smartphones are also identified and discussed by young people.

Despite collecting innumerable accounts of children's everyday communicative practices, providing a totally detailed picture of young people's communication repertoires is far beyond the scope of this report, which is only aimed at highlighting the main changes associated with new devices and services. Also, we are not interested here in comparing different platforms and their uses in depth. A few general observations can nonetheless be drawn: the adoption of social networking platforms and services is uneven across the nine European countries. For example, WhatsApp is largely used in Germany, Italy, Spain and the UK - its adoption leading to the partial reconfiguration of Facebook and Tuenti in Italy and Spain, and to the dismissal of BBM in the UK - while it is less or not at all mentioned by interviewees and focus groups' participants in Denmark, Belgium and Ireland. Snapchat is more often discussed in interviews and focus groups with Danish children, while Instagram is mentioned especially by Danish, Italian and British children, the latter being also especially active on Twitter.

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[7] Indeed smartphone users engage more in each of the online activities measured - more specifically in communication via instant messaging or SNSs, and in sharing or entertainment activities alike (Mascheroni & Ólafsson, 2014).

However, although some of the children's discourses are app- or service-specific, and despite social media and messaging platforms continuously changing, the meanings and consequences of the practices through which children engage in mobile communication are generalisable. In other words, while the emergence of new devices and tools is accompanied by a remediation of those already used, the communicative practices of children and teenagers we are observing today also show many continuities with desktop-based social networking or pre-smartphones mobile communication that are likely to survive (boyd, 2014).

3.3.1 Opportunities and beneficial consequences of smartphone use

Smartphones and instant messaging apps are credited for making communication with friends "super easy" as Emil, a teenage boy from Denmark, puts it. Children are enthusiastic about the unprecedented ease of communication and the variety of communication modes and channels available; **many interviewees believe they are more "sociable" since they had a smartphone**, as the excerpts below show. The rise in peer communication by means of mobile apps and platforms is, however, not universally perceived as beneficial for sociability, as we will see across this section. Indeed, both adults and children fear that mobile communication takes place at the expense of face-to-face interaction, which is perceived as leading to deeper relationships. However, many children - especially pre-teens who benefit from autonomous interaction with peers for the first time - value social access to friends:

Interviewer: What has changed now mobile devices are so popular?
 Elien: I'm more social now.
(girls, 12-13, Belgium)

Alan: I talk more and I talk to a lot more people in general because the ability is there in my hands, it's much easier to… (…) I have Facebook and they have Facebook and I have my phone and it's quite easy to communicate.
(boy, 14-16, UK)

As Alan's words suggest, the changing communicative practices are enabled by particular **affordances** of

smartphones and new messaging services that children remark upon in their discourses. First, smartphones are portable devices, meaning that communication facilities are perceived as **always "at hand"**. Second, in contrast to SMS (Short Message Service), communication through social media apps and instant messaging apps is **free** of charge, thus encouraging a continuous, intermittent flow of communication; third, these apps enable **group communication**, thus supporting the practice of **"broadcasting"**. The following quotes from interviews and focus groups summarise the three properties of mobile internet that result in a perceived rise in peer communication, as well as showing children's reflexive engagement with mobile devices and tools:

Joachim: it's smaller so you have it always with you. So you can always use it. (…) if the possibility is there, you'll just use it more.
 (boys, 15-16, Belgium)

Sara: well, how much do I use it? I use it… basically I always have the smartphone in my hand.
(girl, 15, Italy)

Sarah: Instead of using SMS, Snapchat is for free, here you can just take a picture, write a textbite and send it.
(girls, 11-13, Denmark)

Anuj: it's free. (…) if you had normal text people only message you if they need to message you. And you can't really create groups on text message so I think that's why you might message more. So if you want to tell, let's just say, about your birthday party, or something, you could instead of sending it individually, and paying a lot on the text message, on the group you could send it one time for free and everyone would know about it on the group.
(boy, 11-13, UK)

Beyond an increase in the volume of communication, children identify further outcomes of the three affordances of mobile communication, changes that relate to four different practices of peer communication: micro-coordination, perpetual contact, networking and expanding one's circle of friends, and sharing media content. While the two former communicative practices have already been recognised as typical of mobile communication, so far the latter two have been primarily afforded by online social media.

Micro-coordination

Researchers studying the adoption of mobile communication among teenagers in the late 1990s pointed to new forms of interaction and coordination supported by mobile phones. More specifically, mobile communication has facilitated micro-coordination (Ling and Yttri, 2002) - that is the planning of if, where and when to meet (Ling & Haddon, 2008) - by making it more flexible and personalised. The smartphone has inherited and improved this function of mobile communication by making many-to-many communication available. WhatsApp and Facebook (partly accessed through smartphones), then, are the preferred means of coordination with peers:

Valerio: If you need to call a friend to tell him where you are, that your are coming, you can call
Emanuele: We agree on where to meet and where to go on WhatsApp.
(boys, 11-13, Italy)

Perpetual contact

Smartphones and new communication apps also contribute to enhancing the second form of peer interaction already afforded by mobile telephony: the so-called hyper-coordination (Ling & Yttri, 2002). In contrast with previous discussion of constraints of use of smartphones - with awareness of costs limiting use[8] compared to SMS and voice calls, communication on messaging apps and social media is no longer constrained by issues of cost - although it might still be subjected to time and space constraints, since children are forbidden to use the smartphone in certain contexts or are not provided with an internet plan (see Mascheroni & Ólafsson, 2014). As a consequence, children describe a continuous flow of communication with friends, which punctuates their daily routines and provides many children with a sense of **"perpetual contact"** (Katz & Aakhus, 2002), or "connected presence" (Licoppe, 2004). Some boys and girls praise the **full-time access to friends** that smartphones afford - highlighting the emotional relevance of mobile communication - while others negatively frame constant availability as a constraint, as we will see. Adults, too, are aware of how children use smartphones to extend their face-to-face

interaction by creating a 24/7 communicative bubble:

Andrea: we write on iMessage, on Facebook. And in class on Instagram we send sometimes pictures to each other and things like that (...) So we keep in touch all the time.
(girls, 14-16, Denmark)

Valeria: What changed thanks to social network sites, and the new ways of communicating, is that, for example, every time I log into Facebook I know I can find someone to talk to, or if I need anything, I know there's someone there, that I can take as a point of reference, have fun with.
(girls, 14-16, Italy)

Federico: I see that the "school time" is now extended also at home. Students are in perpetual contact as a class group. They are in constant contact with the sport group alike, to not speak of any other group. (…)They know they will see each other at eight o'clock, but there are circumstances in which they start getting in contact at 7.30 am, like are you coming? Where are you?
(Teacher, secondary school, Italy)

Daniela: They are not addicted because they have internet access, they are addicted because this is how they communicate.
(parents, 11-13, Italy)

While the content exchanged may be irrelevant or secondary - often to the disappointment of adults, who lament children are wasting time in nonsense communication - **these communication practices serve as a confirmation of friendship ties**. According to many interviewees, **smartphones and associated apps have improved communication aimed at reinforcing group belonging and at strengthening relationships**:

Ionela: 'You can communicate much better and to the questions if I communicate more with friends with the smartphone, yes; I started befriending them more because of WhatsApp, going into groups and finding more things about them.'
(girls, 10, Romania)

Hannah: 'I feel more connected with people, as I have freedom to talk to them whenever I can.'
(girl, 11-13 Ireland)

Giorgia: 'it has changed a lot because before we didn't keep in touch once back home. When we didn't have a smartphone. (...) And it is much better now because it

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[8] See Section 2.3 earlier in this report.

strengthens relationships. I used to feel lonely before, because everyone else had a smartphone and they kept in touch, they had Facebook and I didn't.'
(girl, 16, Italy)

While adults also make use of phatic communication to communicate proximity and care, they condemn this practice among children as non-sense and useless communication. In this respect, smartphones and new communicative services are not different from older practices as texting and beeping:

Rebecca: 'Because all they want to do is chat with friends and WhatsApp and Facebook and Twitter and whatever they want to use.'
(teachers, 11-13, UK)

Making new friends

As anticipated, however, smartphones and new communication apps combine functions, practices and meanings of mobile telephony and the internet. Hence, the range of communicative practices and the type of audiences children are now able to engage with by means of mobile communication is enhanced (Bertel & Stald, 2013). Beyond being the tool for "the full-time intimate sphere" (Ling, 2008; Matsuda, 2005), the smartphone offers also the opportunity to make new friendship ties. The Net Children Go Mobile survey showed that 24% of children accept friendships requests from people they have never met before but with whom they share friends (the so-called "friends of friends"). Moreover, while contact with people met online - and not offline yet - is sporadic, 26% of children communicate with online contacts on SNS at least every week, 16% call them on their mobiles at least weekly, and 11% report exchanging texts with them on a weekly basis (see Mascheroni & Ólafsson, 2014). Jackie, a 13-year-old girl from Belgium, tells that mobile devices have *"improved the contact with peers from other schools"*, and Alissa, a 12-year-old German girl, believes that her circle of friends was *"enhanced"* by the "*faster contact options through smartphones*". **The practice of expanding one's social networks by activating latent ties, such as "friends of friends", is reported especially by Italian children**, who are also more likely than peers in other countries to accept requests of friendship from people with whom they share contacts on SNSs - 45% of Italian children

adopt this strategy against 11-28% of respondents in other countries (Mascheroni & Ólaffson, 2014).

Stefania: This year I started to practise athletics, and I met this girl who is the best friend of a (girl) friend of mine. So I met her, but through the smartphone, messaging [...] we became closer friends thanks to the opportunity to keep in touch without ... meeting face to face, just through messages.
(girl, 13, Italy)

Henrik: But you also meet new friends, sometimes when they play online they get asked whether they have Facebook or Skype. And then they say yes, and then it quickly develops, and they talk to them and then suddenly they are connected in sort of way. And then it's like something emerges, whether it's a friendship or a "gaming-friendship".
(father, 11-13, Denmark)

Sharing

Smartphones have also made it easier to share in real-time everyday life activities, experiences, feelings and opinions with one's circle of friends by means of textual and/or visual communication:

Martin: I think it's just like this…if you go for example…having a walk with the dog. Now you just have your dog and your smartphone and you say "I'm having a walk with the dog". While previously, you had to…well, the dog had to wait, you had to open your laptop and post "going to walk with the dog". So now, it's much easier.
(boys, 14-16, Belgium)

Hugo: it's funny… for instance, we went to a very nice restaurant… the food was nice, well, you can take [a photo] since you are going to Mac[Donald's] everyday
Gil: that is more for Instagram, Instagram is like your daily life'
(boys, 14-16, Portugal)

While the increasing facility to share represents an opportunity of mobile devices for many, others perceive it instead as a source of problematic communication, including meaningless or unhelpful communication or "noise", as we will see later. For example, June (mother, UK) complains that *"it's quite unbelievable actually, when you watch them in action, isn't it? How many photographs they take."*
If the camera phone democratised photography, turning it into an ordinary practice (Scifo, 2005), smartphones have turned both **the sharing of photos with larger audiences - or networked publics** (boyd, 2014) - **and the editing of pictures**

into **a mainstream practice**: as Beryl a British mother, explains, her son "*Alistair uses his small device for photos. He'd take photos, edit photos, and clips of video.*" Indeed, 28% of smartphone users report uploading pictures of videos to share with others every day, against 10% of non-users (Mascheroni & Ólafsson, 2014). Pictures are modified by means of photo-editing apps and shared on Facebook, Instagram, or WhatsApp:

Valeria: I mean, I have a camera, but I don't fancy carrying it with me. When I have to go to particular places, I would bring it. But often I like to take pictures of stupid things, or with my friends, I use the iPhone
[...]
Valeria: yes, and then there are apps that help you make funny pictures. I like to play with pictures.
(girls, 14-16, Italy)

While the increased sharing facility has contributed to new risky experiences for children, as analysed in Chapter 4, it has also been used for more beneficial outcomes. Among the positive consequences, children identify the transformation of homework into a collaborative activity conducted through WhatsApp[9] or Facebook, where children upload pictures of assignments or translations.

A frequently discussed service such as Snapchat can also represent an opportunity for peer communication. For example, girls refer to the short life of pictures - 6 seconds - as liberation from the normative pattern of online self-presentation, whereby both boys and girls are urged to carefully select pictures and share only "perfect" photos. This need was discussed in the previous section but in the context of seeking a particular body image (e.g., thigh gap); here it is more about keeping control of your own image, of how you want, or do not want, others to present you on line.

Nora: The pictures, they are there for some seconds and afterwards they disappear. So it is not like they are staying the whole time, that means it is possible that it is a quite embarrassing picture or something. It doesn't have to be perfect or something.

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[9] The use of WhatsApp for communication with class mates is popular in Germany and Italy, where children report having dedicated WhatsApp groups for the class. The Italian focus groups participants and interviewees all agree that the class group on WhatsApp has replaced the Facebook group both for doing homework and for daily chitchat.

Linda: Or, when you put something in the story, then it's like that, you don't post it directly so that the whole world can see it and like it and whatever, but you can see it for 24 hours and then it disappears. And when somebody takes a screenshot - you for yourself are able to see that.
Nora: Then you can ask the person to delete that, too, somehow. You are able to see that directly.
(girls, 13-14, Germany)

Gaia: yes, it is an app that doesn't save photos, so I can take even ugly pictures, because they are useless, than I write a comment under the photo [...] Nothing is saved, so you don't feel like -Gosh, this picture is not good enough.
(girls, 14-16, Italy)

This also suggests that things are more complicated than adults expect, and that devices or platforms never pre-determine their uses. While Snapchat is usually associated with the practice of sharing (inappropriate) pictures by both adults and children, some children report having creatively adapted the service to their own needs, thus using it for textual communication. To this purpose, the picture itself becomes secondary, and the text is what matters. The practice of taking "meaningless" pictures (of walls, of floors) to which a textual message is superimposed or attached is especially common in Denmark, where Snapchat seems to be used as WhatsApp is in other countries:

Filippa: I just do like this right? Take pictures into the ground … and then I write uhm "good morning" … or else I take a picture of myself and write "good morning".
(girl, 10, Denmark).

Nicolas: I don't take pictures of anybody that much, I just write the text on something, like a white wall or something.
(boy, 9-10, Denmark)

3.3.2 Negative outcomes of mobile communication

However, the increased speed and scope of mobile communication, that is praised by many children, brings about negative consequences. Children identify a number of downsides of perpetual contact, which affect both mediated and face-to-face interactions.

Normative social accessibility and entrapment

Perpetual accessibility to one another by means

of mobile communication has become taken for granted (Ling, 2012), and **normative**. As anticipated, while "*to be connected with the rest of the world*" (Giulia, 11-13, Italy) is recognised as a beneficial affordance of smartphones, children are also aware of its negative side: indeed, most children think it is 'a bit' (39%) or 'very' (42%) true that they feel more connected to their friends thanks to smartphones, but three out of four children (72%) also agree that they **feel they have to be always available to family and friends since having a smartphone** (Mascheroni & Ólafsson, 2014). So, although some children report being "annoyed" by constant availability to peers - for example, Jens, 15, from Belgium, laments "*what bothers me is that you're always busy, and that you have no rest*" - they usually conform to the social pressure to be "always on". Social access to peers, it is believed, has become of even greater importance with smartphones, and as illustrated in Section 3.2.5, communication has intensified. Parents, too, recognise the impulse for constant availability that smartphones encourage, and admit that they themselves are vulnerable to this imperative:

Sarah: when we were younger, and we had those old phones It was like, you could easily forget it at home, but now, where you can use the social media, now it's really important!
(girls, 11-13, Denmark)

Roseline: And I think it's about the intrusiveness and I feel it as an adult, the inability to put it down and turn it off and ignore it. I think that they're just dropping off to sleep and it goes ping! It's oh, who's that?!
(…)
Amelie: I do agree with that, the constant availability. 24/7. And if they are using it as an alarm clock and they sleep with it next to their beds, not only is the light on quite brightly sometimes but yes, there's that constant thing that keeps them…
(Teachers, primary school, UK)

Children are aware that temporary or permanent disconnection is negatively sanctioned and troublesome: problematic consequences vary in intensity, from finding a long list of unread messages to scroll on WhatsApp or Snapchat, to being excluded from face-to-face interactions due to the inability of catching up with the conversation, to the feeling of **exclusion** from the peer by those who don't have a smartphone:

Kai: Because all the others have a smartphone, I think that I'm more unavailable now because nobody calls on the home phone but everybody is writing WhatsApp messages.
(boy, 13-14, Germany)

Carla: last summer at the lake (…) she hangs out with older kids. And the only one who is her age already had a smartphone last year (…) So they already created a group on WhatsApp and they text to let others know when they arrive, so she is already excluded from all this.
(mother, 9-10, Italy)

Eliza: I follow so many people on Twitter that I can't actually physically read everything that they say, so what I do… I probably go onto my mentions because my mentions are full of the people that I want to see their tweets and I… then I just go through that and look at the people's tweets I want to see, instead of reading everyone's, so I probably just go through my Twitter but it takes so long.
(girls, 14-16, UK)

Giuliana: and when you go online you find a lot of messages, they might be interesting but you don't bother to read them all and then the next day in class they talk and you don't know what they are talking about.
(girls, 11-13, Italy)

The feeling of entrapment generated by normative mobile maintenance expectations (Hall & Baym, 2011) and etiquette - whereby one should be always accessible and reply in real time - **appears to be radicalised by new features of instant messaging apps** and SNSs alike. Knowing that the sender is notified when the message has been received and read `causes` **anxiety** as well as **misunderstandings** in relationships with friends. The feeling of compulsion and discomfort at the same time is expressed in particular by Italian and Romanian teenagers, as in the following examples:

Bianca: And it is easier to get angry because you cannot really understand other people's reactions. For example, on Facebook it displays if it has been read, to inform you the receiver has seen the message. But it may happen she doesn't reply immediately, so you feel hurt
Gaia: Yes, it could just be because you are taking a shower, so you saw it quickly before entering the shower… "why didn't you reply?"
Bianca: you are always compelled to reply, because I fear my friends might get angry because I haven't seen…
(girls, 14-16, Italy)

Interviewer: So it's not nice no to answer?
Andrea: Yes, in my opinion, well if you really have problems or if you're away and cannot talk, yes, nobody says anything. But when you get messages and you see and you're not in the mood to talk (…) so, it's a very stupid idea that they write and can see that I saw the message and this is the most annoying: to write someone and to get "seen at.." and not to be answered.
(girl, 15, Romania)

That real-time notifications represent an issue in Italy is also documented by the following conversation among parents, which reveals a potential tension between technological affordances and social affordances and expectations. While new features of mobile apps prompt an immediate reply, and social accessibility to others is generally desirable and legitimate, the speed of communication leads to misunderstandings and conflicts, as both parents and children note.

Roberto: a downside of Whatspp (is that), for example, I was coordinating a meeting with a friend to do homework together and to him it indicated, Whatsapp said that I had seen the message with the double tick, I don't know how to call it, the "message seen" icon, while instead I only… I had seen the incoming messages but I was out so I did not have time to check it, I was doing something else, so I closed the notifications and I didn't even read the messages. That maybe… Like, "hey, you could at least answer me".
(boy, 14-16, Italy)

And:

Greta: now the technology says when you receive a message, it says that you were online but you did not answer
Giacomo: but I must have the freedom to read (a message), think about it, keep it there and do not answer, to answer when I feel … nowadays it is taken for granted that if I send you a message you must answer.
(parents, 14-16, Italy)

Being notified that a message has been received and read on WhatsApp or Facebook, and waiting for an answer, is even more troublesome in the case of romantic relationships, as in the following excerpts:

Michele: I'd rather prefer someone sends me a harsh reply than being ignored, because when one is ignored, one feels really…
Massimo: then you spend hours making hypotheses on that and later 'sorry, I didn't have time to answer before
(boys, 14-16, Italy)

Giorgia: on Facebook, when someone chats with a special person, such as a boyfriend or someone she has a crush on, maybe, this person was answering the message but suddenly had to do something else (…) he had opened the message but afterwards he went away… Then the girl starts making thousands of questions and she worries… I think that, before this feature existed, that says when someone has seen your message, things were better.
(girl, 16, Italy)

Nonsense and noise

Children also discuss the negative implications of the increased ease of communication on the quality of communication itself: beyond originating an overflow of messages that it is difficult to keep up with, the **free messaging apps stimulate continuous, but nonsense, communicative exchanges**:

Interviewer: speaking to people before …they say sometimes "There's just too many messages now. (…) Do you have this type of…?"
Joshua: Yes …100% …like every time on Facebook or on Skype someone says 'I have this and this' and it's like 'I'm not going to ask you because I don't care'. I'm not even trying to be rude just who actually cares? And it is really annoying because …

Gaia: there's much more communication now, because one had… SMS had a certain cost, so you sent one, without writing two thousand things. Instead, now one writes thousands of messages, with thousands of emoticons, thousands of nonsense, really useless things, thousands of exclamation marks, and stuff.
(girls, 14-16, Italy)

The uninterrupted communication flow is particularly criticised by adults, especially parents, who lament children are continuously distracted by irrelevant messages while they are doing their homework. On their part, children adopt defensive strategies such as leaving the phone in another room, selecting the silent mode or leaving WhatsApp groups:

Michele: either you choose the 'do not disturb' option, because in the silent mode it still vibrates, while the 'do not disturb' mode is if as you didn't receive anything.
(boy, 15, Italy)

Indeed the **noise** - literally and figuratively - of WhatsApp conversations is indicated as one of the

main reasons to reduce one's participation in peer groups of any sort on the app:

Alessia: we also have the group of the class
Giulia: so do we, but I left it
Marina: a lot of people left it
Alessia: in our group you get 40.000 messages per second
Giulia: um, that's also a reason.
(girls, 11-13, Italy)

Drama and conflicts

As already noted, the new functions of messaging services are a potential source of conflicts and arguments in the peer group. Children also raise the issue of how increased communication opportunities, and especially the possibility of sending free messages, have led to impulsive, or even aggressive, communication:

Anuj: Yes, I think smartphones have made it possible for people to be mean more, because if you were paying for text you'd probably think more, saying, I'm going to be paying for this text, or my parents will be paying for this text. Is it really worth sending it? Whereas now on WhatsApp or Facebook you can quickly message and send it for free. So I think that's kind of opened it up to be like cyberbullying more, or sending silly messages…
(boy, 11-13, UK)

Fabrizio: My daughter passed the limit on WhatsApp, so she lost, she had a conflict with her friends, for bullshit, and if she had talked face to face rather than texting she would have probably solved the issue before having a fight and losing their friendship...
(parents, 9-10, Italy)

In some cases, new communicative practices facilitate cyberbullying, as suggested above - for example exclusion from a WhatsApp group is a bothering experience according to both children and parents, as explored later in Chapter 4. More often, **children report instances of "drama"** (Marwick & boyd, 2014): **aggressive communication that is reciprocal** and involves girls in particular. Being conducted in public WhatsApp groups or Facebook walls drama is particularly annoying for by-standers alike:

Giuliana: or it happens that, always in groups, that people

start an argument for a trivial thing, and if you side with someone
Giulia: the other one is disappointed
Giuliana: the other starts teasing you and "so now you take her side?" (…) And then someone, because they should have arguments in private, or if it is two or three people quarrelling someone leaves the group and then asks to be accepted back
Alessia: also in my class, there's always someone who abandons WhatsApp groups every while'
(girls, 11-13, Italy)

Disturbance of face-to-face interactions

As with mobile phones before**, the smartphone is also a resource for co-present interaction**: children of any age report talking about the latest games they have downloaded – "*we show each other the things we have, new games and things like that*" says a 12-year-old boy from Spain; or using smartphones to check out curiosities they are talking about; or accessing other people's profiles on Facebook when talking about potential romantic partners.

However, children complain that the compulsion to be always accessible to others and to reply in real time - that has become part of an unwritten, taken for granted mobile etiquette is also **a source of disturbance of co-present interaction**. Children in all countries lament being bothered by peers who spend their face-to-face time texting with distant others because "*for doing that you could have stayed at home!*" as the same Spanish boy comments. Indeed, social reasons play a role in setting limits to "anywhere, anytime" mobile communication, as we saw in the previous chapter. This is a further example of how smartphones amplify social consequences of mobile phones. What children find inappropriate and difficult to manage is the conflict between two social situations one co-present and one mediated that overlap and interfere:

Catherine: We've become much more asocial. When you go to a bar, sometimes people are just being all the time on their smartphones. And then I'm thinking…why do you come to the bar?!
(girls, 14-16, Belgium)

Victoria: We arrange to meet on a Saturday at six in the afternoon and each one of us has our mobile and there are times when maybe we don't talk for ten minutes. And that is

what we've met up for, to be like that…
(girls, 14-16, Spain)

Reduced face-to-face interactions

Beyond disturbing face-to-face interactions, **smartphones are associated with a decrease in the time spent together face to face**. Younger children, for example, lament consequences for school time, especially school breaks, which was once dedicated to collective activities in the playground. On this basis, many schools have developed a smartphone-free policy, to protect a space of offline sociability. Teenagers point to less sociability in contexts of co-present interaction and less hanging out with friends offline:

Mikkel: there is a lot who just aren't together that much … so there is many that just sit and play instead of playing soccer or basketball.
(boy, 11-13, Germany)

Amelie: There was a time when they were playing games in the playground before the bell went, which was knocked on the head and said no, phones are not out then.
(teachers, 9-10, UK)

Katrien: It became more intensified [mobile phone use] at the moment when you go to 3rd grade (age 14). In the first and second grade (age 12-13), you were still playing with each other, and talking about what you were doing. (…) And now everybody is just sitting down on the playground, with the mobiles in their hands. So face-to-face communication has decreased a lot.
Tamara: We are less social now.
(girls, 14-16, Belgium)

Parents and teachers alike lament that smartphones have compromised or decreased face-to-face interactions with peers, both at home, at school, or in other places:

Bettina: I think that… the number of children, that visit our house, has decreased dramatically, after these… Both that the boys have gotten older, and also that they use these smartphones a whole lot.
(mother, Denmark)

Matteo: The decrease of "physical" sociability is very visible, my son goes out very rarely (…) my son drives me crazy because two of his classmates live 200 meters from our house, and another one stay 1 KM and half away, and they never see

each other. They only communicate with the iPad, and this makes me…. (angry).
(parents, 14-16, Italy)

Emily: Any interaction, as well, their one-to-one face is less because they spend so much time on the screen.
(parents, 11-13, UK)

Nora: On school trips, they bring their devices (…) if the bus trip is long, either they spend their time with these tools in their hands without speaking to each other, I mean, their interpersonal relationships are mediated.
(teachers, 9-13, Italy)

Comparing children and adults' discourses on the consequences of smartphones for peer sociality then, shows how they both share concerns regarding the downsides of mobile communication: new technological affordances such as the gratuity of texting on mobile apps, the ease of sharing one's everyday life through images, and notifications of reception and reading of messages all combine with social expectations and norms, producing anxiety, annoyance (for an overflow of communication), and concerns (for aggressive communication or disruption of face-to-face interactions).

3.4 Changing communication in families

Miguel Ángel Casado & Estefanía Jiménez

This section addresses some of the most notable changes and consequences derived from the emergence of smartphones and tablets in households - in particular, communication between family members, considered through the voices of children, parents and teachers. In the study of the adoption of the internet by children, the role of the **family has been traditionally addressed as a crucial mediating agent** providing information and training for the safe use of this technology, especially regarding to the contact of children with other unknown people (Dürager & Livingstone, 2012). For some years, internet use for communication in the family was especially linked to situations of separation or distance between relatives. At the same

time, studies of mobile communication have long addressed **the ambiguous role of mobile phones in the parent-child relationship** (Caron & Caronia, 2007; Ling & Haddon, 2008; Clark, 2013). Indeed, the emergence of mobile devices provides families with the opportunity to be permanently connected as never before – probably as they never have been. This connection can generate both positive and negative aspects. Thus, despite contact with colleagues and friends being a priority in the communication of children using mobile devices, the family also occupies a very important place in their experiences related to the internet.

However, the blooming of communication technologies can also have negative effects on family relationships. Actually, time devoted to the use of smartphones and tablets is sometimes stolen from the time that otherwise could be spent with relatives, and often involves the neglect of other activities previously performed with siblings. Although the devices and their applications should be understood as potentially enriching opportunities to share and interact, these devices given the personal nature of their use can also become a source of conflict.

As we will see, most of the conflicts mentioned by families are derived from what parents deem to be excessive use of these devices, albeit a perception that is blurred and hard to measure.

In fact, this **parental perception of excessive use is often caused by lack of knowledge about the functioning of the smartphones** that places children as the reference point in relation to the use of communication technologies within the family.

3.4.1 Networked family

The Net Children Go Mobile report (Mascheroni & Ólafsson, 2014) shows that many children use their smartphones to stay in touch with their parents. According to the report, 21% of children considered it "very true" that they "feel more connected to their family", while for 36% of children, this statement is just "a bit true". In many cases, this communication comes from the initiative of parents to monitor the activities from their children. In most cases, it is simply by calls or messages of children to tell parents where they are or to ask permission to come home

later.

Stefania: When I am out with my friends I call her and I say "mom, my friends come back later, so I'll also come back home later" because, maybe, before I do not say a precise time of my return since maybe my other friends stay out more and I also want to stay, so I call her and I say, I come back at this time.
(girl, 13, Italy)

Stefania: I communicate with my mum on WhatsApp so, in a way it is much better because when you are out, if you have a problem, you just call or text and they reply.
(girl, 13, Italy)

In some countries, as in Italy or Spain, where WhatsApp is widely used, it is also quite common to create groups for family members in order to share pictures and other kind of content:

Arianna: On WhatsApp we have also created a group with my parents, my dad and mum, and we write there... for example they sent me a funny video, I don't remember exactly what it was but we exchange funny things. Or we keep in touch when my dad is away for work. He left with a train once and so he wrote us to update that he had arrived, these kind of things.
(girl, 13, Italy)

Nevertheless, these virtual groups are used not only inside the families themselves, but to have an allegedly easy relationship with the families of friends or classmates of the children, and in order to make it easier to coordinate the development of children's activities.

Alessandro: My mum also bought a phone, a smartphone in order to access WhatsApp, to join the family group. But there's also the school group, because a number of mothers that pick up from schools, so if she has to inform other people that she can't accompany or pick us up from school, she writes it on the group.
(boy, 13, Italy)

Daniel: Sometimes it can be funny. Look, the mums and dads, particularly the mums, of my sister's class have made a group called Supermamis 2, like the film Superman 2 but Supermamis 2. And there they talk about… there are videos, one was of Superman to support the rugby team, with those in the orchestra making a Y, like Superman, saying something on the pitch … It was great.
(boy, 10, Spain)

However, beyond these uses, in some cases **families also use technologies to keep in touch by means**

of geolocation tools. In these cases, smartphones and electronic devices in general are perceived by some children more as an **"electronic leash"** (Ling, 2004; Caron & Caronia, 2007) and as a way for parents to extend their monitoring beyond the domestic context, as a tool for full-time communication. Safety is the main legitimation for both parents and children for using these tools– that is, control of the information when they're out with motorbikes, for example, or when they are afraid the children might get lost. The following excerpts highlight how parents and children mobilise different meanings of smartphones (Mascheroni, 2013), whereby for parents it is primarily a means for functional communication and coordination of mobility. On their part, children resist and negotiate their accessibility to parents:

Giorgia: My sister and I, since I drive a motorbike and my sister drives a car, in case it doesn't work, my dad with Android can locate us and come and help us (…) Well, the app works like this: we are registered with email and an account and, for example, when I arrive home and my dad maybe is out he receives a notification telling "Giorgia has arrived home", so he is more relaxed and there are no problems. If we are outside, I… I dunno, my motorbike stops working, I send him a message through this app and tell him "Dad, my motorbike is broken", he goes on the app and immediately finds me, so he sees in which street I am and he could also tell him "Ok, I come to pick you up with the van" or similar things…. It is very comfortable and useful, also because it is cheap and free for anyone.

(girl, 16, Italy)

Daniela: For a parent the phone is important, to be able to reach your child, because I work so I need to know if someone can pick him up, if anything happens, so as I work I need to have a [sort of] telephone booth anywhere. But everything which is entertainment it has to be limited in time, otherwise children don't spend time with their parents. None of my children can go online after dinner.
(mother, child 11, Italy)

Luisa: When they go out at night we like to be in touch with them so that we know at what time we can pick them up. I think that technology does more harm than good, because kids are so dependent of it. They don´t leave home. I even bought a dog so that my son had to take the dog out to the street and learn some responsibility, otherwise he is always at the computer or the mobile phone or the tablet. His life revolves around technologies.
(mother, children 12 and 16, Portugal)

Sara: They confiscated my phone because I didn't answer

their calls when I was out, because they told me to go back home and I didn't fancy, so I didn't get the call and they got angry, so they used to confiscated it for three days and give it back to me, because they knew I would never talk to them anymore if my phone is confiscated, I get really angry, without a phone you can't do anything.
(girl, 15, Italy)

Although in schools, or during other extracurricular activities the use of technological devices can have a negative side, such as the loss of attention, there are also some teachers who are amenable to them being used. They acknowledge the undeniable ability and desire of children to communicate with parents in the event of any problem. So this is perceived as a positive feature associated with the use of smartphones being at the heart of families.

Lidia: In every moment they can ask parents for advice or just ask them to come to take them home…"I feel sick, what should I do?", "Can you come to take me home?", "Can the driver come to take me?
(teacher, Romania).

Kristof: I think parents give these devices to control their kids… I think, not yet in primary school, but when they go to secondary school in another town. Then I think most of them are sent away with a mobile phone.
Lisa: In case they would have a flat tire or so.
Kristof: Yes, they give it, in case something happens, so the kids are available. I think this really happens a lot.
Lina: Yes, some of them have told me too. That they just got the device, for when they are out and about.
Ben: Yes, it's the same in my group.
(youth workers, Belgium)

By contrast, parents can also be criticised for being too anxious and causing children more anxiety:

Peter: I don't think it's always easy for these children, being so… available.
Joachim: Yeah, it brings a lot of stress.
Peter: Now, it's like….those parents they call and call and send messages… And if the kids don't reply for a while… the parents would go to the police very soon. They are all the time extremely worried. Those children are too available!
(youth workers, Belgium)

Thus, the use of these devices can open up significant opportunities for communication in families, for the comfort related to being in touch easily. Equally, it can provide opportunities to share activities, as Elsa, a Portuguese mother, says, stating that they "*spend*

some good times with the family using the tablet".

Nevertheless, the opposite effect of mobile communication is also discussed, where by parents lament the fact that children spend less quality time with their families as a result of using these devices. In the case of siblings in particular, although the devices can be a door to shared activities, their personal use can sometimes result in spending less time with them:

Giada: [About the negative sides of having a smartphone] I don't know, maybe that now I spend more time with the phone and electronic devices. Previously, when I did not have it, I played more with my sister. Now instead I am more into games.
(girl, 10, Italy)

Interviewer: So, what has changed since you have a tablet?
Martha: *I can play more games now. And without my sister. And I can do more things. I play now less with my sister.*
(girl, 9-11, Belgium)

Elsa, 16, from the UK, feels very frustrated that her sister doesn't seem to enjoy a family holiday at the beach because she is glued to her iPod Touch:
Elsa: Lisa (15) doesn't actually have a phone, but she has an iPod which nowadays, yes, you don't need a phone nowadays you just need a smart tablet thing and you can get everything. She's always snapchatting. When we go on holidays Lisa's sitting there - where's the Wi-Fi? - and I'm going Lisa go on the beach and it's like she has to show to the virtual world that she's on holiday. Like, oh, look I'm enjoying myself, look at the beach - selfie, but really she's just looking at her phone all the time. I'm like Lisa you're making out you're having a great time on your holiday on the beach, but you're stuck there on your phone or your iPod.
(girl, 16, UK)

Generally, the use of smartphones in the family is seen as an opportunity to the extent that parents can contact their children at any time, which means safety, security and a sense of controlling the risks and difficulties allied to giving them different grades of autonomy. However, some parents also point to a downside related to communication technologies, the "perpetual contact" that is related to them, and the potential difficulties that this can entail for young people. This perception is also consistent with the results of the quantitative study of Net Children Go Mobile (Mascheroni & Ólafsson, 2014) which showed that three out of four children felt, and feared, that they had to be always available for family or friends.

Ellen: some things have changed. It can be an advantage that you can phone each other anytime, while previously with the landline phone you couldn't do this. So now you're accessible for each other at every moment. Overall, this 24/7 accessibility is rather a disadvantage. Within the family, you could see it as an opportunity, but out of the family it could be a disadvantage to be accessible all the time.
(mother, boy 15 & girl 16 ,Belgium)

3.4.2 Conflicts arising

Managing the use of these tools also becomes a major source of problems in families, especially related to the length of time of use. Historically the time of use of electronic devices has been a key issue among parental concerns. Mobile devices, because of their personal nature, generate a permanent connection that can be very difficult to manage for both children and parents.

Most of the conflicts arise in families as a result of the use of smartphones, and many times they have to do with penalties for overuse according to the parents' perception, but also acknowledged by the children themselves.

Elena: I am over-using WhatsApp! I am always on WhatsApp, my mother wants to unsubscribe me.
(girl , 9-10, Italy)

Katrien: When I'm all the time on my mobile, my parents turn mad and they tell me to do something else, like reading a book instead of being constantly looking at my mobile. Because it's also bad for your eyes.
(girl, 15-16, Belgium)

Apart from such overuse, **sharing devices between siblings also appears to be a source of conflict**. While going online from a computer is more easily shared, both **tablets and smartphone activities are developed through a system of applications that are tied to a particular user. It is not so easy to share a tablet,** which is supposedly defined and created to be a personalised item. In that sense, there are frequent complaints among parents and children because of the different programmes or apps they surf, download, or use and which can be visible for the rest of the users of the same device. As a consequence,

and in order to avoid these "problems", the explicit desire of children to have their own device is very present.

Sara: I let him have the tablet and he downloads games, what happens is later, my dad buys,… things, but to buy things, instead of deleting his games, he deletes mine, and then I have to download them and my dad gets angry with me and so I told my brother "when I will be given an iPad I am going to give you the tablet so you leave me alone".

(girl, 9-10, Spain)

Giada: I was happy because I have something it is mine and nobody could use it without my permission, because instead when…. Because before my dad had a tablet, so I had to use it with my sister, therefore if I wanted some games and she didn't we had to mediate… Instead now I can download all that I want.

(girl, 10, Italy)

3.4.3 New power relations

Communication related devices, smartphones and tablets have become part of family life in a very short space of time, leaving many parents ill equipped to manage devices about which they have little experience or expertise themselves. This makes many parents unfamiliar with how devices work or what they are used for; accordingly, there are many families where children themselves have been the ones helping their parents in the use of these technologies:

Mary: I think we're in a very unique time span at the moment where adults, those in charge, don't have the technical knowledge that the young people have now, so we don't know what we're saying. They know a lot more about it than we do, and think they know it all. Whereas I think in another generation, well, things will obviously move on, but I just think we're stuck in that, you know, with that kind of lack of knowledge.
(Youth worker, UK)

Alessandro: Most of the time I help them, like, for example, my older sister or my father, or even my mother that has just bought one, sometimes they ask me things and I tell them. But not because someone has taught me that, because… I don't know it just comes naturally… I discover them by myself.
(boy, 13, Italy)

Knowledge is equally shared between siblings, in an intuitive, natural way:

Roberto: Yes, my siblings gave my advice, like, for example about how to use WhatsApp, like, they explained me what it is, not that it was particularly difficult, they explained me quite rapidly.
(boy, 14, Italy)

The fact that in some households children are the only ones who master, or feel comfortable with these technologies, can lead them to be a very important link between parents and the rest of the extended family through its social networking presence. This is, for instance, described by the father of an Italian boy aged 14 who says that his son "*updates us about what happens*' and about '*gossip in the family*." In this case it is also undoubtedly striking that even a 9 to 10 year old child claims his superior mastery of technological tools, considering himself a digital native compared to the adults.

Elena:'Yes, I have many older friends anyway, I live in a family of adults, because I arrived late in my family, I am a digital native.
Interviewer: So your brothers are older?
Elena: 19, 23, 24
Interviewer: And who told you are a digital native?
Elena: It is since 2000, since 2000 you become a digital native, then those born in 2005 are in another category as they are more advanced, I am a digital native.
Federica: So am I!
Elena: Yes, we all are!
(girls, 9-10, Italy)

Interviewer: Is your mother capable when using the tablet?
Jeremy: No, she's not very familiar with it. That's why I help her.
Interviewer: You help her?
Jeremy: Yeah.
Interviewer: So you are the expert, the tablet expert?
Jeremy: Well, tablet and mobile phone.
(boy, 10, Germany)

This situation has led, in many cases, to children taking the role of being responsible for the decisions made in the family which relate to new technologies, such as buying new devices for their siblings or helping younger brothers or sisters in safe use of internet. They may also be involved in the decision when the time comes to acquire tablets or mobiles to get connected to the internet.

Lucy: About this tablet…I'm not sure it it's a good idea. But on the other hand…I don't want that she's behind on the others, that she's deprived from it. Because there is this social pressure. And on the other hand, she has an older brother and sister. And they tell me "Ooh mum, you should buy this for her, because it's too soon". So they tell me this, because I think I'm more easy-going in these issues. Although I know many things can happen…

(Mother, girl 11 years, Belgium)

Lieve: She received an iPad last year, with the money she received for her holy communion, last year. It was like, you know, the money of her first communion was still on her bank account. And the older kids all have their iPhones. So, we decided, together with the older kids, they also give advice. So now she's got an iPad. And she has a mobile phone too, also received for her holy communion.

(Mother, girl 13 years, Belgium)

It is questionable whether children are equipped to take on the role of being empowered to influence or guide purchasing decisions for household technologies, given the fact that they may not be ready to deal with commercial markets. If parents trust their children when it comes to acquiring communication devices, it is reasonable to expect they should be aware of the real need and characteristics of these goods.

In summary within the family mobile devices, and smartphones and tablets in particular, can enable a permanent connection between parents and children. This connection is often encouraged by parents seeking to know what their children are doing all the time. On the other hand, the emergence of these devices also creates new situations in family life that may lead to conflict; this is fundamentally linked to notions of overuse that can entail fewer shared activities with the family.

First, the consequences and meanings of new mobile devices for social life are still being defined and discussed. Indeed, smartphones and tablets are often a source of conflicts and tensions, and their meaning is often polarised around contrasting dichotomies. One is perpetual contact versus entrapment from normative social availability. A second is real time communication, virtually independent from space and time constraints versus social, time and space constraints that generate anxiety, failure, misunderstandings and conflicts. A third is ease of communication and sharing versus an endless flow of meaningless messages and noise. And a fourth is social proximity versus isolation; augmented relationships vs. loneliness, etc. These tensions signal that the practices developed around smartphones and tablets and their meanings are still being negotiated and are not yet stable.

Second, to many readers who are familiar with the literature on mobile communication and children, many of the points raised in this chapter would not sound revolutionary. Indeed, smartphones (and, to a minor extent, tablets) combine mobile communication and online media. It is no surprise, then, that their consequences on every day practices and sociability are rather **evolutionary**.[10] This combination, however, **amplifies the implications of mobile and online communication for children, while at the same time posing new challenges for both young people and adults alike**.

It is clear that adults and children attribute different meanings to mobile online communication. Yet, concerns about continual accessibility and over-dependence, about the rise in both nonsensical and aggressive communication and about the disruption of face-to-face sociability are seemingly shared by children and adults alike. In other words, children are reflexive and critical too.

3.5 Conclusions

Giovanna Mascheroni

Children and adults' discourses on how and to what extent smartphones and tablets have changed their everyday practice, their interactions with peers, and interactions with family help us draw some preliminary conclusions:

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[10] On this point see also Bertel & Stald (2013).

4 Online risks and risks related to the use of smartphones and tablets

4.1 Introduction

Children associate smartphones and tablets with a wide range of opportunities. However, they are also critical regarding the problematic experiences that mobile internet use may and sometimes does involve.

In the Net Children Go Mobile qualitative study we also collected children's discourses on online risks in general. However, in this report we **mainly focus on those experiences which, according to children, are smartphone- and tablet-specific**, either because they are totally new (e.g., risks associated with location-tracking functions or the risk of smartphones being stolen or lost), or because new services and platforms make "old" risks more challenging and difficult to cope with .

The first section examines the **most common unpleasant situations that children experience** in relation to:

- bullying and harassment

- strangers

- personal data misuse

- sexual content and communication

In addition other problems are explored:

- unwanted content (other than sexual content)

- health and overdependence

- technical problems

- problems related to commercial content

- mobile-specific issues (geo-location, stolen mobile devices).

The second section discusses **children and adults' perceptions of mobile-specific risks** and shows that risk perceptions go hand in hand with perceptions of digital skills and users' characteristics - younger children are perceived as less skilled and more vulnerable to online risks. More specifically, perceptions around the following risks are analysed:

- bullying and harassment

- sexual content and communication

- meeting new people on- and offline

- health issues and excessive use

- commercial risks or viruses.

The third section examines **preventive strategies and coping measures**, distinguishing between:

- self-reliant versus others-reliant strategies

- technical measures

- confrontation

- combined strategies

- collective measures

- disengagement

4.2 Risk experiences

Monica Barbovschi

Children in the Net Children Go Mobile project were asked to write down good and bad things about the

internet, smartphones and tablets and were later asked to discuss those things they had written spontaneously. Many unpleasant things that came up in the individual or group discussions were related to their general internet experiences irrespective of the devices chosen, although some situations were smartphone- or tablet- specific. Many of these, understandably, related to risk experiences discussed in the EU Kids Online project (Smahel & Wright, 2014). The common ones, now experienced on mobile devices as well as more traditional platforms such as PCs and laptops, are not covered here, since the focus is more specifically where experience through mobile devices is somehow different.

One should note the inevitable overlaps within situations children describe, for example misuse of personal data used for harassing others (e.g. hacking accounts of peers to send nasty messages).

4.2.1 Bullying and harassment[11]

Children reported being harassed through calls and messages on smartphones, usually anonymously; most likely these were pranks played by peers, but in most cases they could not identify the bullies. Peers sharing phone numbers of others without permission can lead to children being anonymously harassed though their smartphones.

New messaging services such as WhatsApp offer new modes of peer interaction, as well as new modes of inclusion and exclusion: one Italian girl reports missing out on WhatsApp group conversation due to technical problems with her mobile, only to return to find a lot of negative messages posted by another peer during her absence (Italy, girls, 12-13).

Martina: I used to have a friend who was really a good friend of mine, but, for while I couldn't use WhatsApp because the it kept on dis-installing it, and I told her because we used to tell each other anything, and on this group she started speaking ill on me, so when I managed to access WhatsApp again I didn't tell her, to make her a surprise, and I read all those messages and we don't see each other anymore.
(girls, 12-13, Italy).

Another way of talking unkindly about peers on WhatsApp is creating "groups within groups" where children can badmouth excluded peers (boys, 14-16, Spain).

The portability of the new devices makes it easier for young people to take each other's phones and send rude messages directly from the accounts of the owner or to answer messages on behalf of the owner, as reported by Italian 9 to10 and 12 to13 year old girls and Romanian 14 to16 year old boys. Another issue that came up in several interviews was children having their phone number shared by peers without their permission and receiving annoying messages and calls as a consequence. This practice is connected with forms of sexual harassment, some girls reporting having unknown people calling them with sexual propositions (Italy, 12-13 girls)

New platforms being embraced by young people can facilitate new modes of misconduct. For example, one Italian girl (12) reported having her picture taken from Facebook and shared on WhatsApp with an entire group and being mocked for posing as "sexy". [12] Another girl reports the new practice of boys secretly taking pictures of their peers on toilets and posting them on WhatsApp groups:

Julian: We were in the train and browsed through a gallery of a mobile and then we found a video. We paused it at a special position where the person was in a funny pose and made a screenshot. Then we posted this in our class chat, but the person was not amused about that [smirks]. It happens a lot that we make a video in the class and then post them in WhatsApp groups.
(boy, 13 years, Germany)

4.2.2 Strangers

As new technologies around the use of mobile devices are entering young people's lives, the literacy necessary for their safe use is still in need of development, which sometimes causes unpleasant situations to occur. One of these is the use of WhatsApp and the skills required in managing

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[11] There appears to be more reporting on "social drama" and a generalised aggressive behaviour in Italy, Romania and Spain which extends to the use of mobile devices and new social apps.

[12] In Germany there was more reporting of children taking embarrassing photos of each other and posting them online.

contacts:

Ana: Yes it can happen (being in WhatsApp groups with people you don't know). There are often people. In my case, the usual thing is someone from my town, and maybe you don't talk to them, but you are in the same group. It's not ideal that someone who doesn't know you has your number, it's not the best situation, everyone knows that. But there are times when some people know other people and in the end you might get to know them, so it might happen, but I'm not in favour of it.
(girl, 14 years, Spain)

Some children reported on things "getting messed up" when they merged Facebook or regular phone numbers and WhatsApp contacts. One Italian girl (10) reported some unknown people being able to add her on WhatsApp and sending her pornographic pictures and not being able to figure out where they got her number. Another girl reported installing an app that looked like WhatsApp, but being flooded with requests from strangers:

Sara: Once, when I had a Samsung, I downloaded an app that looked like WhatsApp because the icon was very similar, but, instead, it was an app that you insert your telephone number and many people see it. So, they found my number on that app and wrote me on WhatsApp and… but they were grown-ups [adults]! And I did not know how to end this, because I had already deleted the app and I did not remember how to go back to it, and I was very annoyed because every day they kept writing me, they added me on WhatsApp and texted me and I always had to block, block, block, block, continuously… Then, luckily, I changed my telephone number and smartphone.
(girl, 15 years, Italy)

One Spanish girl reported sending some stranger a picture of her and her sister by mistake via Bluetooth, while a girl in the UK said she was receiving Skype calls from some stranger she did not realise she had added a while ago. Mobile devices are also the means to tease and mock peers, hidden under the anonymity of hidden numbers, which several children reported (girls, 14-16, Italy; girls, 14-16, Romania)

4.2.3 Privacy issues and personal data misuse

The new platforms catering for groups of users can also facilitate the dissemination of screenshots of private chats into group chat

windows (boy, 14, Italy). As mentioned before, the lack of digital literacy around the integration of new apps with existing ones (e.g. WhatsApp and Facebook) can lead to privacy issues, such as sharing personal details with unwanted people. One Spanish girl mentioned finding an app which was supposed to give her access to other people's chats, but instead the app was giving nearby phones the possibility of seeing her own chats (girl, 10, Spain).

A new way in which children experience privacy issues is from peers standing nearby and seeing their private messages or photos on their smartphone or tablet screens. Sometimes sharing devices with peers (such as for playing a game or checking Facebook) might lead to peers accessing the owner's photo gallery or personal messages (as reported by 9-10 year old girls in Romania). Another Romanian girl (15) reported leaving her phone at home while on a trip and having her sister and father check her personal messages while she was away. Another girl recalls her experience:

Anya: I had my iPod with me on the train and they took it away from me anyhow. I had put it in my backpack and didn't noticed that they took the iPod away and had a look at all my vacation photos.[…] Where I lay on the beach in a bikini and then they made a photo of it with their phones and said: this is really nice.
(girls, 13-14, Germany)

An Irish boy (14-16) talked about losing his phone in the taxi, and being worried that the photos of him and his family at the beach might be misused.

4.2.4 Sexual communication and content

Although the personal nature of the mobile devices offers private access to sexual content, some children think that new devices are not necessarily linked to increased access to such material. In the words of a 12 year old Romanian girl, "*If someone really wants to see them, she or he will find a way*". As noted in Section 2.3 earlier, others do believe that "now with the smartphone, it is much easier to look for porn and go to your room or to the bathroom" (Spain, boys, 14-16).

Regarding unwanted sexual content, **the new**

devices and platforms offer new options for young people to send vulgar and sexual content to each other (e.g. Italian 12 to13-year-old girls mentioning WhatsApp). Another girl mentioned having a cousin using her mobile phone to access pornographic material because his parents were monitoring his own phone (girls, 12-13, Italy). The phone numbers shared without the young people's consent is another way through which young people experience unwanted sexual communication (e.g. phone calls with requests of sex).

Other girls (14-16, Romania) complained about boys bringing and sharing sexual material at school (magazines, but also video clips watched on mobile devices during breaks or even during class). The issue of classmates looking at pornographic materials was also mentioned by Spanish girls (9-10). Ask.fm, as one of the new popular platforms was mentioned in connection with receiving offensive anonymous sexual comments (girls, 11-13, Spain)

Also in connection with the spread in the use of mobile devices is the increased solicitation of sexual communication. Girls talked about the practice of boys sending girls requests for naked pictures of themselves:

Matilda: We also had that, one boy said: Yes, I will send you a friend-request and then you just send me many photos of you and then she send him many pictures of her and then he – But she intentionally said: but don't show them to anybody. And then the boys always show, and most of the time the boys are the ones who, - actually always the bad ones, who pass on for example secrets or you show – or they show pictures around of somebody, who didn't agree to it.
(girl, 11 years, Germany)

4.2.5 Unwanted content

There were no experiences related to unwanted content specific to the mobile devices, but rather the affordances and problems extended to the use of new devices and platforms. In connection with SNSs, some children mention being annoyed by chain messages, such as on WhatsApp, which are easily seen due to the availability of group chats functions. Sophie, Linda, Rosemary and Elizabeth explain what happened to them when they were asked to broadcast scary messages on WhatsApp.

Elizabeth was particularly affected by these messages and her friends tried to encourage her not to be:

Sophie: …if you don't broadcast, we broadcast within 10 seconds your mum will die tonight…
All: Oh, yes, they are horrible.
Linda: They say really scary things
Rosemary: Like broadcast to 10 people or otherwise a girl will come out of your wardrobe tonight or something.
Sophie: And eat you.
Rosemary: Yes. Funny stupid.
Linda: Yes, like this boy has been stabbed or beaten to death and he'll come back and kill you tonight if you don't broadcast.
Sophie: You just delete them. If there was a problem after they broadcast it they'd get annoyed and you'd delete them and then you couldn't keep in contact with them and you don't see them…
Elizabeth: The thing is I'm a big worrier and I get really worried if I don't send these on.
Sophie: Yeah you do
Elizabeth: Yeah but I'm such a s worrier, I know it's not going to happen but I always do it just in case.
Sophie: Yes, but then if you are worried you broadcast and you make other people worried.
(girls, 11-13, UK)

4.2.6 Further risk experiences

The new mobile devices require a specific set of skills, which children still need to fully acquire, particularly with regard to the commercial content they deliver. They talked about advertisements promoting other games on gaming apps, being redirected to the app store while in the middle of a game, or sexually explicit ads.

Erica: Just sometimes because sometimes they just put… because now they see it, some commercials, like by Flora, on a bed now, on YouTube is getting a bit… to me it seems a bit mature for people, especially children, because I've been watching some My Little Pony videos which no one knows about and it's supposed to be dedicated to children, My Little Pony, and then you see, suddenly, Flora on a bed just [doing] entirely mature things.
(girl, 12, UK)

Children also talked about having to deal with the hidden financial costs of apps, such as discovering a lot of apps that they do not remember downloading and not knowing if they were charged money (Italy, boys, 12-13), downloading a games app

that charges every €2 for every SMS they send, or being cheated by the "You've won an iPod" advertisement. More children mentioned they discovered they were charged money after they entered their phone numbers to claim so-called prizes. Another mobile-specific risk one child mentioned was being charged lots of money for playing online games on the phone while on roaming (boys, 11-13, UK). As has been noted in Chapters 2 and 3 the smartphones and tablets bring with them tempting opportunities for game-playing, and access to many more interactive apps that can involve playing or talking to friends, relatives and strangers. While there are various controls imposed by software, adults or by the children themselves, the point at which the commercial content, or indeed any other to the issues discussed in this chapter, becomes risky is difficult to gauge. Some children can be trusted more than others to be aware of avoiding risk whereas others will choose to push the boundaries.

Health and over-reliance are both topics that highlight potential areas in which young people are at risk from the ways they are using smartphones and tablets either with the devices themselves and the new functionalities or specific apps available on those devices, such as WhatsApp or Twitter. **Children also mentioned that they feel compelled to check their devices often**, since now these are on them all the time (girls, 12-13, Belgium) or not being able to stop talking to their peers on the Facebook mobile app. **Being distracted by constantly receiving notifications from chats** was also reported (boys, 16, Italy) such that children develop the habit of checking and to some extent are becoming mutually dependent on the devices for keeping them in touch with their peers.

The issues children mentioned in connection with the use of mobile devices were related to devices themselves or to the content and in particular to **technical problems**. These included: **limited battery and memory, the devices being easily broken, usually by dropping them, slower connection on mobile devices and reaching the internet limit on the device**. Content-related issues were: **viruses that stick to apps, games and apps eating a lot of memory, having the content of the phone delete, and apps that let others see what**

you write on the phone.

Risks arising from potential theft and misuse of geolocation information vary between countries. In some instances children mention having their smartphones stolen (girls, 12-13, Italy; boys 9-10, UK) or their tablet (boy, 10, Romania) and in the UK this is one of the most problematic areas for children using smartphones, as mentioned in Section 2.1. In a few cases children mentioned the danger of being located, such as posting information about being on holiday with the risk someone might burgle their home while it was empty. Just one girl talked about a peer who notified her location when at a park and was tracked by some girls who could not stand her and wanted to retaliate (girl, 14, Romania). For some UK respondents who had experienced the loss or theft of their smartphone the loss of the device was initially quite scary, as Isleen and her sister Teema explain:

Isleen : And I lost mine today actually.
Interviewer: So you haven't got your phone at all?
Isleen: Well, I dropped it [by the house] next door. And I thought I'd left it on the bus so my Dad blocked my phone, but an old lady picked it up and I went and picked it up from her house. Interviewer: That was nice of her.
Teema: yeah.
Interviewer: So let me just ask you about that, so when you realised you'd lost it what happened?
Isleen: I got really scared, I went oh no, I've lost everything because I can't back it up. And then we went on the computer and then we were about to fill in the form,
Teema: Dad filled it in … the lost property thing, but we stopped doing it because we found it.
(girls, 14-16, UK)

Emma, on the other hand, had become quite blasé about losing or breaking her phone as it had become a common occurrence, as well as having one stolen on a school trip. She explained she was not allowed to have an expensive phone like others in her family "*because I can't really be trusted with phones that much. I'm not really responsible.*" She also was not concerned when it as stolen as it was insured and *"there was a password so I didn't really worry'"*(girl, 13, UK).

The reaction that children have to unexpectedly losing their smartphones (or tablets) is not particularly different from that experienced in the past when they lost mobile phones that were not smartphones.

However, in the past once the phone was lost there was not substitute, not WiFi and no convergent devices like iPod touches and tablets with WiFi or 3G connectivity. Thus the loss of a smartphone today is an emotional shock, a problem because of the value of the device, but in terms of losing communication and contact this can quickly be picked up again via an alternative device such as borrowed or family tablet.

4.3 Risk awareness

Elke Ichau & Sofie Vandoninck

Awareness of online risks is of vital importance to the development and adoption of coping strategies. The EU Kids Online study showed that many children are aware of online risks, either through first-hand or mediated experiences (by parents, school or media) (Smahel & Wright, 2014). Some of the things that children say concern them, such as excessive use and contact with strangers, seem to be more inspired by parents and awareness-raising campaigns, rather than being their own real concerns.

Children are aware of the importance of digital skills, and hold themselves, as internet users, at least partially responsible for their online safety. Similarly, when it comes to harmful experiences, the line between perceived victimisation and responsibility seems to be blurred (people who post "embarrassing" pictures for example, are held responsible for eventual negative comments or for the pictures being shared). Generally, younger children are seen by adults as having less digital skills, and are seen as being more vulnerable to online risks, for example in dealing with unwanted content, or exposure to fraud and commercial risks. Vulnerability to sexual risks is mainly perceived as being an issue for girls.

Among children's main concerns regarding internet use we find unwelcome or unpleasant contact with strangers (e.g. harassment, theft, stalking and rape), intimate information or photos being shared beyond one's control, online bullying, encountering unwanted content, and theft or loss of devices. Awareness of "general" and mobile-specific online risks go hand in hand. **However, mobile devices are**

often regarded as facilitating exposure to risks, because of mobile-specific functions (e.g. messaging apps, photo sharing, location-tracking services, like/dislike buttons, games and downloading apps) and features (more private use, less parental control). Another mobile-specific issue is children's awareness about the risk of theft or loss of the device or passwords.

In this section we briefly outline the main findings about awareness with regard to the most common risks and negative experiences.

4.3.1 Online bullying and harassment

Most children care about online bullying, and some have witnessed or experienced it. In the Net Children Go Mobile study the respondents generally regard forms of online bullying as an extension of offline bullying and harassment. The internet, as a tool for communication, can be used for negative comments and quarrelling. In that respect **some children believe mobile devices facilitate online bullying, because these devices allow them to be constantly online and available.** Anonymity and lack of parental and/or teacher control are also believed to be key facilitators for online bullying. In Germany, Leila and Nida, two 14 year old girls, observed that people have more courage and are more likely to offend others or to act cool on the internet, while the same people wouldn't do this in personal face-to-face communication

Interviewer: Do you think bullying now happens more?
Lena: Yes, because more and more children now have an iPod or a mobile phone.
Martha: Yes, I think so, because previously you just could bike home and you couldn't send nasty messages which your parents couldn't find out about. But now that's possible.
(girls, 9-10, Belgium)

In particular SNSs, and platforms such as Ask.fm where people can anonymously ask each other (painful) questions, are mentioned in this context. A group of Italian teenagers explain **how SNSs and messaging apps make it easier for people to gang up against someone,** with, for example, embarrassing photos being shared on Facebook, hate pages being created, or people being expelled from group conversations on WhatsApp (14-16, boys and girls, Italy).

4.3.2 Sexual content and communication

As in the EU Kids Online study (Smahel & Wright, 2014), many children have come across sexual content on the internet. It is mostly classified as unwanted content (alongside ads or violent videos) that, uncontrollably, appears or pops up on commonly used platforms, such as Google, YouTube, Facebook, or gaming sites. Of relevance to this report, **children often encounter sexual content on certain messaging and blogging apps on mobile devices, like Snapchat or Tumblr**:

Iulia: Even the other day, I wanted to connect the laptop to internet and when I entered the online movies website, some commercial appeared with dunno what sexual positions and the link opened directly. I think it's very stupid, because they appear with apps, also with games apps and they are not normal stuff, because they come automatically. Plus, another window opens automatically… when you enter some link.
(girl, 14-16, Romania)

Even though encountering sexual content can be upsetting, children are much more concerned about the risks of sexting. Exchanging sexual messages and content, and sometimes showing these on smartphones, can occur as part of sexual experimenting and/or joking between peers, especially among boys:

Isabella: Because mostly they are (boys) the ones that send it (sex videos and pictures).
Zoe: They are the ones who often send sex videos and pictures.
Interviewer: But, all of them?
Isabella: No, just some of them.
Zoe: Some of them are still babies, still good, they are not very mature.
Isabella: They think that by sending this kind of things they will be older and they will make people like them more?
Interviewer: And, who does it often? The troublemaker of the class is who sends that?
Isabella: Mostly yes.
Zoe: And, of course, the others go along wIth him. "Look what picture I have, ha ha ha!.
(girls, 11-13, Spain)

The practice of (girls) sharing sexy pictures is generally disapproved of, and seen as asking for trouble, whether the pictures are posted on social media or exchanged in private messages. **With the**

smartphone it is also very easy to react to this quickly:

Mateo: But imagine. I am in a relationship with a girl and we decide, hypothetically, to send pictures to each other, we send them "like that" and we trust each other. So imagine the case that you split up with that person badly or there has been some serious problem and they have split up. Then you might be angry and you have the mobile in your hands, to get revenge you might use the photo and send it to other people. To use it like a weapon…
(boys, 14-16, Spain)

Similar to online bullying, **children have the impression that mobile devices facilitate taking and sharing pictures, also sexy pictures that may be misused**:

Rui: Because a mobile phone now ends up being a [photo and filming] camera.
Artur: It existed before, but there were not many and you had to take the picture, then transfer it to a computer etc, but…
Hugo: Now a girl can go to the bathroom, take a picture and send it… Now people are a bit scared to do this, even people in a stable relationship, because you never know what happens afterwards… if it will appear on Facebook. I think even married people… shouldn't be doing this… afterwards they split up and sometimes men are a bit…
(15-16, boys, Portugal)

4.3.3 Meeting new people online and offline

Several children believe that the location-tracking features of mobile devices are risky because strangers could use these apps to find children.

Interviewer: On Facebook for example, you can let other people know where you are. What do you think about this?
Inte: I would never do this! Because, if these people have wrong intentions, like burglars with wrong intentions, they can come to your house.
Rani: So have to enter another location.
Amelie: I would also never do this. But if I would have to do it, I would just give the wrong location and wrong address and phone number to these people I don't know.
(girls, 9-10, Belgium)

4.3.4 Health and excessive use

Compared to the EU Kids Online qualitative findings (Smahel & Wright, 2014), more children now

spontaneously mention addiction or overuse, and **many agree that they spend too much time online and/or on their smartphones**.

At the same time **overuse by other people is considered stupid and even irritating, especially when it gets in the way of (offline) social interactions.**

Victor : There is some addiction.
Vlad: Because I tried to see it in some people, who even when they are on the street, they start typing. I think it's pretty weird to talk to someone and they are staring at a screen.
Interviewer: when you talk about addiction, what do you mean?
Vlad : First, when they spend a lot of time, causes problems, and at school during classes or when I see them walking on the street and talking a lot, but a lot on the phone.
(boys, 14-16, Romania)

What seems to be the (genuine) underlying concern behind fear of addiction, is online activities getting in the way of school and homework, with bad grades as a possible result. **Across countries, social networking and messaging notifications on mobile devices are often mentioned as distractions from focusing on homework.**

4.3.5 Other risks

Specifically related to mobile devices**, one major concern is about theft of or damage to the smartphone** and keeps many from taking their smartphones to school and other places (e.g. sports clubs), and from lending them to others.

Commercials, spam and pop-ups are found to be annoying, and many children say they avoid clicking on them. Younger children are felt to have less skills or literacy in this respect, and thought to be more vulnerable to commercial risks, for example by opening spam messages, "unintentionally" doing online purchases for example while downloading paid services or apps. Smartphones are believed to facilitate this, because of the availability of apps to download.

Viruses are among children's top concerns. Most say their parents installed firewalls on their home computers, but they do not usually have any such software on their smartphones.

4.4 Coping and preventive measures

Sofie Vandoninck

4.4.1 Introduction

The EU Kids Online qualitative data showed us that coping behaviour and preventive measures are strongly interconnected, as children's coping strategies often aim at avoiding re-occurrence or further escalation of the unpleasant situation. Several quotes illustrated how children learn from their experiences, and start adopting preventive measures after coping with an unpleasant situation online (Barbovschi & Vandoninck, 2014). Therefore, the topics of coping and preventive measures are discussed together in this report.

In the Net Children Go Mobile study, the focus of the qualitative section is not on risk experience, although children regularly and spontaneously commented on how they cope with online and mobile risks, and how they try to avoid or prevent unpleasant situations. Across countries, we see that between 6 and 10% of all coded comments are about coping or preventive measures. Understanding how children deal with online and mobile risks, especially learning what they consider as helpful or effective strategies, is a crucial step towards the development of awareness raising initiatives. Also mediation practices should accommodate to children's preventive and reactive strategies in dealing with online and mobile risks.

Children do not always distinguish between online and mobile risks. When services such as SNS are used on both portable and non-portable devices, the line is particularly blurry for most children and their comments on how to deal with risks could refer to both types of devices. The first aim of this section is to find out whether the preventive measures and coping strategies employed for online risks "in general", which are defined in the EU Kids Online study, are also applied to unpleasant experiences with mobile devices.

As some risks are mobile specific (i.e. fear of losing the device or begin stolen) or may be exacerbated by

mobile devices (i.e. overdependence), we assume that certain types of preventive measures or coping strategies could be related specifically to these mobile services or devices. So **our second purpose is to look at how children deal with these so-called "new mobile risks".**

The EU Kids Online study identified a number of parallels between preventive measures and reactive coping, which is used as starting point for the thematic analysis (Barbovschi & Vandoninck, 2014). For each of these five topics, we look at whether they remain valid when related to mobile-specific risks, and how exactly these strategies are followed in relation to mobile risks. These topics discussed below are the result of the EU Kids Online thematic analysis, building on the theories of the transactional model developed by Lazarus & Folkman (1987), and the approach-avoidance model by Roth & Cohen (1986), integrating subsequent typologies on (online) coping strategies (Sleglova & Cerna, 2011; Parris et.al., 2012).

4.4.2 Self-reliant versus other-reliant strategies

In some situations children prefer to deal with the problems themselves, while in other they decide to seek support within their own social network (parents, peers, siblings, etc.) or institutional support (schools, online helplines, counsellors, etc.).

Self-reliant strategies

The small size and portability of mobile devices have created some extra challenges for young people to deal with. Familiar tactics of avoidance and self-monitoring are used to deal with these new challenges. Kristine (girl, 14, Germany) explains she is very wary about embarrassing pictures on her mobile phone gallery, so she goes through her pictures every day to delete all silly or embarrassing pictures. She believes this is a better strategy than constantly making sure that nobody suddenly takes her phone to have a look at the pictures. Many children mistrust geolocation in SNS, and claim not to feel comfortable about using geolocation apps or functions, and they avoid using it or only use it in very specific circumstances. The most common motive is fear

about "dodgy" people tracking or following them, or burglars robbing their house while they are away:

Griet: You have to make sure that on Facebook your location services are deactivated. Because otherwise, there is this arrow. And if you click on it, everybody can see that his message is sent in our city for example. Sometimes even the name of the street is indicated, and that's dangerous. But sometimes it can be fun to post a message where you are, for example in the proximity of our city. But you have to be careful with private messages, because there you have this arrow, indicating your exact location. A friend of mine once sent me a private message on FB [FaceBook], telling he was in the city. But I could see it was sent from his home, so he lied to me. So you can find out where people are, and you have to be careful about that.
(girl, 12 years, Belgium)

Pernille: It's the same on Facebook, here you shouldn't write "Now I'm going to the Rosengårdcenter (shopping mall) with my family", because then someone knows and they can burgle your house.
(girls, 11-13, Denmark)

Louise: Well, many of my classmates are scared, because they say that there are people who track you und stuff like that. That's why we always switch off the geo-location function.
(girl, 13 years, Germany)

Children now more often talk spontaneously about self-monitoring tactics to avoid overdependence of mobile devices. They are aware that the continuous presence of mobile devices distracts them from other activities such as homework, causes sleep deprivation, and some children complain about their friends or siblings only looking at their screens during playtime. This motivates some young people to take action and put their mobiles away during certain activities, use more often the "Do not disturb" mode or become more selective in to whom and when they reply:

Stefania: I check my smartphone after lunch and then I go to do my homework, I leave it there, in the dining room, so that I get not distracted by it, indeed I started using this strategy because when I received messages I had the instinct to immediately go to see them, while if I leave it in the dining room maybe I do not even listen the sound of incoming messages and I keep studying.
(girl, 13 years, Italy)
Unai: When it comes to studying, particularly, I usually get rid of it. If not, it distracts me, so I give it to my mum so as not to

lose concentration. And it is much better like that. At first I didn't do that, and now it is much better.
(boys, 14-16, Spain)

Andrea: And then I put it away. And then when I go to sleep, I turn on the "Do not disturb", such that stuff don't come up when I lie down to sleep. Because I think at some point I didn't do that and for example, you are just about to fall asleep, and the screen just lights up or something. It is quite annoying.
(girls, 14-16, Denmark)

As noted in the previous section, the portability of mobile devices is related to another new worry among young people - fear of breaking or losing the device, or of it being stolen[13]. For most children, the device is something precious that they do not want to lose. The most common strategy to **avoid loss or theft involves not taking the device outside, especially not to outdoor activities or public places with many people** (e.g., public transport, parties). A few children mention the use of protection cases or special pockets in their bags or clothes:

Angela: I don't take the tablet to places with me. I only use it at home. Because I don't get a signal outside and a person might steal it, if I have it with me. I just decided to use it at home.
(girls, 9-10, UK)

Daniel: Well, me, I consciously would be, okay, I need to be careful how I'm going to use it, where I'm going to use it, where to put it. Because people put their phones in their pockets and then they just drop out and they lose it, so I'd usually put mine in my top left blazer pocket so I know it's there at all times.'
(boy, 14-16, UK)

Other-reliant strategies

Children regularly rely on others when dealing with problems related to mobile devices. Generally, contact risks are more likely to be discussed with others. Typical examples are receiving nasty messages or pictures of themselves they don't like. Children both seek emotional support and practical assistance when talking to others about such issues; it may be a relief to discuss what

happened. Moreover, others can support the victims in their further interventions to solve the (technical) problem.

When situations are escalating and turn into drama, intervention from others is sometimes required to calm people down and to look for a constructive approach to solve the problem. In this case, **the most important criterion for approaching a person is trust and discretion, not necessarily good technical skills with mobile devices.** While some children prefer a parent or a teacher, others turn to an older sibling or a friend. Very few children mention institutional support, such as counsellors, helplines or the police:

Bea: Martha doesn't like tensions. As soon as someone gives a negative comment, she comes to me "oh, mom, please, they are fighting again, what should I do"? She doesn't like things like that. And then I'm saying: "Martha, take the phone and call them to talk about it". But normally, she's not really involved in these fights. But it happens that one of her friends has a fight with another friend. And then they fight on Facebook. And Martha says: "but they are both my friends…!".
(Mother of Martha, 13, Belgium)

Others may also initiate interventions to assist children in dealing with unpleasant experiences online. Children talk about parents, teachers and sometimes even older siblings giving them advice and/or monitoring their (mobile) internet use. Young people seem to have ambivalent feelings towards these interventions. On the one hand, children understand most adults have good intentions to protect them and it makes sense to be advised or monitored. Younger children in particular appreciate parental interventions and perceive them as helpful.

Klara: My mom told me yesterday: I have found out that you shouldn't put up that many pictures on Instagram.
(girl, 9-10, Denmark)

Another example is provided by a Danish father with two boys (9 and 11), telling a story about his boys posting a picture on Snapchat, explaining to his sons that you can never be sure the picture disappears completely after 10 seconds because the receiver could take a screenshot. The boys are surprised about this fact, but the father believes they boys have learned a lesson and that the advice was useful.

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[13] Children in the UK (and to some extent in Romania) talked more about preventive measures against devices being stolen, lost or broken.

On the other hand, advice or guidelines from parents or school are sometimes criticised or even bypassed. It is mainly the older teenagers who are more sceptical, although it depends on the type of relationship they have with the person, what the advice is about and how it is communicated.

Parents also realise that not all rules and guidelines are easily accepted, and that their children sometimes (try to) cross the line. Secretly taking mobile devices to bed to play or communicate at night is common practice. A Romanian mother explains how she caught her boys (aged 11-13 years) playing "quietly" with their mobile phones in their shared bedroom late at night. A Danish mother of a 13-year-old boy comes up with a very similar story, now understanding why her child was so tired in the morning. Parents clearly struggle to find a good balance between giving advice, monitoring and restricting their children's mobile activities:

Kristel: I once told my son, look, we should check on your Facebook if your settings are OK. And on this boring tone he said "Oh mum, please!". So he didn't want to do this. So sometimes I'm wondering…because I don't see much content from him on Facebook. So maybe he didn't allow me to see his full profile. Actually I should check his settings when he leaves his Facebook account open…then I can access it. But yeah…you shouldn't do this as a parent.
(mother of Benjamin, 15 years, Belgium)

Mother: When they're out of parental view, that's when things happen. When they're in parental view, they're less likely to go off on a mission, which they shouldn't be on, so it's almost the whole sign in things, and I can't say that it's 100% of the time, because my daughter definitely has her phone in her room, and sometimes she's up there, and she'll be chatting to her friends on FaceTime and we're like, you haven't signed in your phone…They have to bring them downstairs, they have to give it in at night, so they're not having them upstairs.
(Mother of Rula, 14-16, UK)

Regardless of whether it is appreciated or not, children whose online/mobile activities are monitored tend to be more careful about what they post or share, as they do not want their parents to criticise, ridicule or punish them:

Alejandro: I don't have WhatsApp set up to download videos that are sent to me automatically. When they send me a video, just in case some day my parents find me with one of

those videos, I don't want to have videos like that. Because I don't gain anything by having them, but I can lose a lot if my father or my mother catch me with a video of a guy with a chicken. So what I do is have it set up so that I have to download it, and I wait a while and if someone comments "that's disgusting" and when I see that comment, I don't download it.*
(boys, 14-16, Spain)

In an attempt to bypass parental monitoring, some children exclusively use alternative apps or platforms with their peers. Anuj (boy, 11-13, UK) says he now uses Instagram to share pictures with his friends. The problem with taking and sharing pictures with the iPhone is that the picture gallery is immediately synchronized with the shared family iPad. So to avoid his mother seeing the pictures he has taken with the iPhone on the iPad, he now used Instagram to make sure that only specific people can view it.

4.4.3 Technical measures

These strategies involve active intervention or "interaction" with the device or service, with the aim of solving the problem or avoiding a (re)-occurrence of the unpleasant situation. It generally requires some level of digital skills to operate the device or service.

Imanol: Yes, because you can block that, and in the street it is difficult to 'block' a person. With WhatsApp it is easy. You just go to Settings and Block, and that's that. So, that about cyberbullying on WhatsApp can be avoided.
(boys, 14-16, Spain)

However, **not all children are able to change smartphone settings and their level of operational skills can be (very) limited.** Sara (15, Italy) was very upset and concerned after some unfamiliar app constantly sent her notification to get in touch with other people. She was not interested and tried to delete the app. Unfortunately, she did not succeed in deleting it and removing her contact information properly, and continued to receive unwelcome messages and images. This story illustrates the importance of digital skills, and how it could increase children's capability of dealing with unwelcome (commercial) messages.

Looking at mobile devices in particular, some typical technical measures can be identified. **Many children**

claim they turn off or change geo-location functions, to protect them from strangers or people with bad intentions trying to find them. Geo-location apps are more easily accepted if they provide help locating their device when it is lost, Another common strategy is installing a code or password on a phone to make sure no other people have access to it. Children suspect parents and other family members in particular from sneaking in their (private) messages:

Elena: [I dislike] when my sister tries to take my phone, she is older and she wants to check everything I do, so I set a very long password on my iPad, a really long word, and on the iPhone I have numbers but still a complicated password.
(girls, 9-10, Italy)

Pranav: I have a setting on my phone where you can do a pattern or a number so that is kind of good but then again you'd still have to cover it because I know I've remembered my pattern so I don't need to look at my phone to know how to… where I'm pressing so I can just face it down and do it. So that's a good option.
(boys, 11-13, UK)

Some children talk about technical measures to bypass parental and school monitoring of their mobile devices. Children tend to consider mobile devices as personal items, and older teens in particular are more sceptical about parental monitoring, resulting in them developing techniques to bypass this. Examples are taking screenshots from sensitive or private messages before deleting them from the inbox, blocking parents from SNSs or using settings to prevent parents from seeing all content on the profile, clearing the history or deleting conversations, creating secret accounts, etc. In some households, parents turn off the WiFi access at night, to avoid children from being online at bedtime on their mobile devices. However, some children manage to bypass rules at home and at school:

Interviewer: Can you explain how you arrange that your dad can't see anything? Mehdi: Well, just in the settings…
Lennert: Yes, the settings, and then delete it. Gilles: My dad checks my Facebook. He logs in on my account, but I know when he does this. He always does at the end of the month. So then…every time right before he will do this, I make sure I delete all the messages [laughing].
(Boys, 12-13, Belgium)
Marika: I'd say that one hour of supervised internet access, at home, is enough. Having their phones with them at school

makes it easier for children to access the internet. Then can easily put the phone under the desk, where the teacher cannot see, and access it. Especially, when it's a known fact that some students broke the school's passwords and the ones from the neighbourhood block of flats.
(Mother, 9-10, Romania)

4.4.4 Confrontation

Confrontation refers to personal confrontations or discussions, face-to-face or online. Non-violent confrontations are mainly aimed at clarifying misunderstandings and avoiding escalation. Violent encounters are often the result of taking revenge and getting back at the perpetrator. An Italian youth worker explains how cruel discussions among girls can take place on WhatsApp, as they insult each other, getting trapped in complicated nets. As a youth worker, Daniele tries to make the girls aware that it is better to step aside the conflict, and not to get involved in retaliation.

In the context of posting or sharing "unwelcome" messages or pictures among peers (friends, classmates), **face-to-face confrontation is a recurring strategy, mentioned across all age groups**. Ea (girl, 11-13, Denmark) says that her mother encourages her to talk and stand face-to-face with the person who is angry with her, instead of trying to solve it through text messages. Ea's mother Mariane also believes it is important that parents call and talk to each other to keep an eye on their children's activities and to guide them in case a situation escalates completely. Such situations happen both on mobile and non-mobile platforms and services. However, both parents and children notice that mobile devices facilitate sharing (potentially) disturbing or hurtful messages.

Jolien: One of my friends went to a party, and he had to throw up a lot. And another guy took a lot of pictures of this incident with his mobile, and the next day these pictures were on Facebook. So when my friend woke up and turned on Facebook, he saw all these pictures [laughing]. But he was OK with it. But if they would do this to me, I wouldn't like it. I would ask the person to remove the pics, or I would change settings on Facebook and indicate those pictures and 'inappropriate', and then the pictures disappear.
(girls, 15-16, Belgium)
Bettina: But actually there was something that unleashed a larger conflict in the big boys' class. Something

about…someone had commented on, how somebody looked on some pictures on Facebook … and that kicked off a lot turmoil about whether they needed some AKT, or what the hell it is called… to solve it. Yes, it can quickly become something, that [mobile devices] can become like a new kind of … "Conflict-initiator". No doubt about that!
(mother of boy, 11-13, Denmark)

Non-violent confrontations can be a very effective approach, as they clarify the intention of the sender and how the receiver interpreted the message. These examples illustrate how both online and offline confrontations were helpful in neutralising a situation:

Nusha: I know that there was a thing of this kind and the children were giving 'likes' to the picture which the girl has specified that she didn't want it there. The certain thing is that, in the end, the picture was taken down, at the girl's request. The children thought it was a joke. The things calmed down, eventually.
(mother of boy, 14-16, Romania)

Daniel: But if someone is framing someone, then you're, "Calm down, it's not that big, don't take it too far".
Interviewer: This is advice you're giving them, sitting next to them having a chat, or this is advice you're sending…?
Daniel: On the BlackBerry.
(boy, 14-16, UK)

4.4.5 Combining strategies

Regardless of whether incidents happen **on mobile or non-mobile devices, coping and preventive behaviour are not about using a single strategy**. When Sebastian (11-13, Germany) feels bothered because of the social pressure to reply immediately to text or WhatsApp messages, he has no specific strategy to deal with this. It varies. Sometimes he just ignores the notifications for a while and at other times he writes that he had other things to do and could not reply immediately. It is common to combine strategies towards a stepwise solution of the problem; when the first strategy turns out to be inefficient or unsuccessful, children employ a broader range of coping strategies and build up towards a more complex approach. Elise (14, Germany) first said "no" to a boy that claimed to be in love with her, sending her text messages and asking to meet him. When he continued texting her, she decided to block his number.

A problem typically related to mobile phones and requiring a combination of coping strategies is strangers contacting or calling multiple times, often described as "stalking". These phone calls are likely to come from (vague) commercial companies, or from semi-strangers (friends-of-friends) or peers playing pranks. Most children feel very bothered and uncomfortable about these "strangers" randomly contacting them. When ignoring turns out to be unsuccessful, most ask for help from parents or another person they trust. In a few cases, even intervention from the parents could not stop the "stalking", and they had to contact the provider or go to the shop to change the child's mobile phone number:

Giuliana: And then often they call, I mean, someone gives them your phone number without permission and someone you don't know calls you and asks you to sleep with him. Alessia: yes, that's true. Giuliana: so I hang up but they keep on calling me, and after a while I get angry so I hand the phone to my dad so that they stop calling, or when I am not at home there's this friend of mine who can imitate voices and I ask him "pretend to be my father and play the man" so he answers and they stop calling.
(girls, 12-13, Italy)

4.4.6 Collective approaches

Children acknowledge that social support in dealing with unpleasant situations online can be very helpful, both in terms of emotional support, as well as practical or technical assistance[14]. Among all age groups, children talk about the benefits of collective coping. When confronted with online bullying, support from bystanders is perceived as helpful and important for emotional well-being.

Sille Marie: Or if I for instance sit and write with someone from our class, and then the person suddenly writes: "Fuck you…" and stuff like that. Then you're like, thanks a lot! And then you take a screenshot and put it on Instagram and say "See what I just got, what do you think I should do..?" So then you feel better, because maybe someone says: "Oh just fuck

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[14] Italian and Romanian children seem to talk more about "collective" coping among peers in situations of bullying and social drama. Peer support plays an important role, and children try to get support from bystanders when a situation is about to escalate into a drama.

them you are beautiful!", and then you feel much better.
Sarah: Your self-confidence gets a boost!
(girls, 11-13, Denmark)

Children express their preferences about who can take part in collective problem solving. The type of situation plays a role: assistance from a teacher may, for example, be helpful in online bullying incidents among classmates.

Parents and teachers also acknowledge the value of collaborating. Several stories illustrate how parents and teachers support each other in mediating and monitoring their children's mobile activities. Collective coping can be very helpful, although it is not always evident and it can be complicated to find a good approach. A secondary school teacher from Germany talks about an incident with a hurtful video of a girl uploaded in the class's WhatsApp group. His attempt to talk with the mother of the perpetrator to clarify the situation was not successful. A personal talk with the children at school was more fruitful, and apologies were given. Eventually it turned out that the perpetrators were very scared of parental repercussions, and asked the teacher to be discreet about what happened.

4.4.6 Disengagement

In some situations, young people decide not to engage in any preventive or reactive measures [15]. Children are not always motivated to engage in preventive actions or proactive coping behaviour, including in relation to problems arising on mobile devices. When measures are perceived as ineffective or the situation seems unavoidable, children tend to have an indifferent attitude. This Spanish boy has the impression that changing mobile phone settings had no effect and felt disillusioned:

Emiliano: You send a notification and it says, for example, with that phone setting that says "You wish to be located for…" and I don't want to be located. And you click on not being located, and even so you can still be located so I don't know why they bother offering the option.
(boys, 14-16, Spain)

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[15] Romanian children seem to report more often an attitude of "disengagement"; not (pro)actively dealing with (potential) risks because they believe it is unavoidable.

Young people's motivation for not engaging in communicative coping is mainly the belief that adults will not be interested, do not take it seriously, would be angry or even reprimand or punish the child. Children tend to weigh up how "serious" an issue is before confiding in an adult, as they do not want to bother parents or teachers with every little trifle in their life. However, sometimes it is difficult to estimate whether it is "just kidding" or something more nasty:

Emilie: The first, that was just one where my table partner he had his phone, and you can do something where you turn it around and then it is just all black and it looks like a black screen. Then he put it into my face and then took a picture. It was just all the way up in my face, right? And then it was send to everyone on Snapchat. Then people took screenshots of it right? And I just look really stupid on that picture [laughs]. So that is really mean, but uhm… that's how it is.
(girl, 14-16, Denmark)

4.5 Conclusions

Most of the problematic experiences of the mobile internet that children report are indeed related to new communicative platforms and opportunities. For example, bullying and harassment takes on new shapes, as when children are anonymously bullied on WhatsApp as a consequence of their phone numbers being exchanged without permission or of their belonging to WhatsApp groups with people they have never met face-to-face. So risks are often combined: privacy issues and personal data misuse are often perpetuated to bully others or to send sexual messages. Other problematic experiences are associated with the psychological and emotional dimension of mobile phones and mobile communication: indeed children report being "addicted" to texting and chatting on their smartphones. Pop ups and commercial risks also pose new challenges compared to the desktop-based internet experience.

The risks that are most diffused do not necessarily coincide with what are perceived as most problematic. Indeed, the analysis of children's discourses of risks shows that contact with strangers tops the list of children's main concerns, followed by misuse of personal information and pictures,

exposure to unwanted content and loss of the device. Despite awareness of "general" and mobile -specific risks going hand in hand **mobile devices are often perceived as facilitating, exposure to risks**.

Regarding coping and preventive measures, the thematic red lines identified in the EU Kids Online study on "general" internet use remain valid; children generally deal with risks on mobile devices in a similar way. However, as mobile devices seem to provoke more issues related to overuse, children now come up with **more (preventive) measures to deal with the consequences of the omnipresence of mobile devices,** such as leaving the device in another room, turning it into "silent mode", etc. Both children and adults seem to have the impression that mobile devices facilitate sharing unpleasant or hurtful images and messages. Because of the small size and portability of the devices, it is now **easier to take "stupid" pictures or record "embarrassing" incidents**, which can be shared immediately with little effort. Besides this, some features such as geo-location are mobile-specific and bring some extra challenges for young people to overcome.

These findings indicate once more the importance of digital skills, which are required to change settings, such as selecting modes or turning off features. When children acquire a personal mobile device, they should master a number of basic digital skills to operate the device in a safe and responsible way. Support and assistance from parents, teachers, family members and peers can be very helpful. The results show that building online resilience is fostered in a supportive social environment where children learn, step-by-step, how to deal with risk on mobile and non-mobile devices. Parents and other caretakers should find a good balance between active mediation, monitoring online activities and imposing restrictions, depending on the child's age and personality.

5 Parental mediation

5.1 Introduction

This chapter examines parental attitudes towards and experiences of smartphones and tablets, as well as the practices through which they mediate their children's relationships with mobile media.

The first section explores the **motivations that lie behind the decision to give children a smartphone or a tablet,** including the discourses on the appropriate age at which children should acquire those devices originally noted in Chapter 2.

Parents' attitudes towards their children's use of smartphones and tablets vary:

- Many parents are aware that mobile devices are valuable items at risk of theft.

- Many are also worried about potential unrestricted internet access in public places that smartphone and tablets provide.

The second section deals with **the challenges related to children owning and using a smartphone and a tablet to go online**. Emerging issues include:

- Potential tensions and the compromising of trust between parents and their children, as well as the rights to privacy claimed by children.

- Parental responsibility to ensure the child's safety.

- The help and assistance that is required to support the children as they develop their understanding of the new technologies and devices.

The final section analyses the **rules** that have come to be used by parents in their day to day management of their children's lives. This includes

- the amount of time and time of day the devices can be used.

- Issues of parents managing compliance and being consistent, especially in interactions with siblings and peers.

Although this study is specifically about 9 to 16 year olds numerous parents interviewed had younger and older children and thus within this chapter we acknowledge the broader age range, in particular, the 8 to 18-year-olds.

5.2 Motivations

Cristina Ponte

Some reasons for providing children's own smartphones and tablets have already been expressed in Section 2.2 earlier: the child had been borrowing the family members' devices mainly for games; it was a reward for success in school or it was a gift on Christmas or birthday; or it was a hand-me-down phone when parents and other members of the family upgraded their own. Parents reflect whether the child is "mature enough" to have the device and balance to what extent it is really needed when the child's movements are under control. Some parents continue seeing a smartphone merely as a mobile phone, for calls and coordination within the family. For instance, both Francisco's children - a boy (13) and a girl (10) - have smartphones given by relatives. This Portuguese father thinks his children *"don't need this kind of device, the mobile phone they had before worked well for contacting parents."* (Father, girl and boy, 10-13, Portugal)

In fact, the Net Children Go Mobile survey showed considerable variation across countries in the percentage of children who own smartphones: 84% in Denmark, 58% in the UK, 45% in Italy, 40% in Ireland, around 30% in Belgium and Portugal, and 26% in Romania. Children's ownership of tablets varies less, from 10% in Italy and Romania to 29% in the UK. This difference may be related to distinctive motivations – from the child as well as from the parents – for assuring individualised access to each one of these devices. In whatfollows we focus on reasons for providing smartphones to children or not and whether this reflects in part cultural differences.

5.2.1 Broader sociocultural context

The debates on the "right age" for providing a smartphone to the child showed interesting divergent views that may be associated with the broader context. The household of a Danish couple with three boys breathes technology: the father works in a company that develops mobile solutions for mobile phones for companies, and the mother works at Novo Nordisk. Jasper (11) and Nikolaj (8) have iPhones, after having explored their own iPod Touch devices; Ilias (5) has not yet got a phone and plays with his tablet. Parents note that nowadays in Denmark four-year-old children have smartphones, but they consider eight-year-olds the right age for owning a phone.

This scenario contrasts with the views of some Portuguese mothers collected in a focus-group. Irene, a clerk, is mother of two boys (12 and 14) who don't have mobile phones. She does not feel comfortable with the smartphone she got from her husband and says these devices are "too sophisticated". Considering other uses of these devices besides telephone calls, she adds that *"things children do with smartphones may be done at home at the computer, under our surveillance"*. For Alice, another clerk and mother of three children, smartphones and their apps would be *"more adequate for the 18 year olds+"* Her boys (14 and 17 a) have smartphones, "*the first ones that arrived at home",* and the girl (11) has a mobile phone. Alice says that owning these devices has improved their self-esteem:

Carla: they are happy because they are using the device, but for us, as parents, I am not seeing any improvement.
(Mother, 11 – 17, Portugal).

Parents of Italian adolescents who attend a *Liceo*, a public elite school, express other reasons. Beatrice thinks that giving her children a smartphone is better than giving them a PlayStation, a device she did not buy. Marta gave the device to her daughter because *"forbidding things makes them more desirable"*. They agree on the potentialities of the smartphone for young people. *"They have the opportunity of exploring any subject in depth, looking for extra information"*. However Beatrice and Alessandro do not think their children are actually doing this right now, *"they don't benefit from this opportunity yet"*.

These different vignettes suggest that, besides age, the family context and broader sociocultural context also matter. Other views emerged from the voices of parents and from teachers commenting on parental mediation nowadays.

5.2.2 Pressure to buy children smartphones

The 11 year old daughter of Lucy, a Belgian mother, wants a tablet because *"all the other kids in her class have one"*. So Lucy thinks **peer pressure plays an important role in the acquisition.** Ana, a Portuguese mother of a 10 year old girl, stresses that *"children, particularly girls, are anxious about having new things, whatever these things are"*. Currently unemployed, this journalist says she tries to avoid her daughter's exclusion from the peer group:

Patricia: I bought her a very cheap mobile phone, without functionalities… it is not what she was expecting and she sighs and sighs…
(Mother, girl, 10, Portugal)

Suggesting that peer pressure and economic status are relevant for providing children with smartphones is particularly common in Romania. A mother says she would not have bought her adolescent boy a smartphone *"if he had not seen the devices of his peers and felt bad because he doesn't have one"*. Living in a rural area, Mihaela adds: "*it does not matter if the parents don't have financial means, they still buy their children some sort of smartphone"*. Having bought two smartphones for his two sons of 6 and 10, a father says he could not buy just one, *"it wouldn't have been fair for the younger son"* and he adds:

Igor: Everyone is relaxed because each member of the family has a device on their own. They have smartphones, a tablet, a PC.
(Father, boys 6 and 10, Romania).

A primary school teacher comments that she had asked parents not to buy mobile devices for her six-year-old students. Despite this, three quarters of the children have received a tablet for Christmas. Another teacher added that *"sometimes it is not about the children, but about parental competition"*.

In fact, the role of consumption in parent-child

relationships has to be understood by bearing in mind triangulation between a number of processes. One is broader historical changes in family life, including ideologies of parenting. A second is the complexity of the process that exceeds a simple power struggle between two (or three) unequal contenders. And the third is the parents themselves, who are inevitably invested in consumer culture (Buckingham, 2012, p. 144). Buckingham stresses that "social class is a key issue here" and that "these relationships operate in increasingly fraught ways in a context of growing social inequality" (p.144).

Although the references to peer pressure are cross-cultural, they emerged as the dominant motivation expressed by Romanian parents and teachers, as if they were embedded in the public discourse on children and new media. The references to class and wealthy families also incorporate notes on the poverty experienced by parents in their own childhood. This argument is also found in Portugal and it should be noted that both countries have experienced a remarkable economic and social change in the last decades.

A Romanian teacher notes that *"most parents grew up missing a lot of things, so they want their children to be happy and not miss the things they missed; for that they make a lot of effort".* The Portuguese teachers express similar views. One says, *"it is a matter of competition. A kid that has all the brands of clothes and the best smartphone is almost automatically seen as the leader of the group and the class, and he is well regarded by his colleagues…'* A colleague adds that *'parents are also influenced by it."*

As said, this reality is not exclusive to Romania and Portugal. However it is remarkable that many similar views come from the two countries where fewer parents own a smartphone or a tablet (30% and 18% respectively). Romanian and Portuguese children are in the bottom positions in terms of owning smartphones, compared with other countries from the Net Children Go Mobile study.

5.2.3 The umbilical cord

In 2010, the American sociologist Margaret Nelson used the expression "Helicopter Mums" as a metaphor for part of a wider trend, the "hyper-involved

parenting". This kind of parenting was reflected in the fact that the amount of time US mothers spend on child care activities has risen steadily since 1965, even as more women have entered the workforce full-time. Lynn Schofield Clark (2013), who takes this figure of the "helicopter mum" in her analysis of digital families, presents the mobile phone as a tether[16]. Clark notes how the current use of technologies by mothers "reflects this desire to remain in constant contact with their children" (Clark, 2013, p. 168).

Moving to Europe, from the Net Children Go Mobile interviews and focus groups it can be said that both fathers and mothers seem to feel a similar anxiety and a need for the child to become "always reachable", "always close to them". In Belgium, Portugal or Italy, teachers and youth workers share stories of parents calling their children during class or outdoors activities, even though the parents are aware of the school rules. The "umbilical cord" is a metaphor used by Italian teachers in different focus-groups, suggesting again a shared idea about parental behaviour.

This cord may have the form of a GPS. In fact, it can be "the" motivation for providing the child with a smartphone. Italian mothers of 9 to 10-year-olds stress how **geolocation is useful for monitoring their children**: Marta asks her daughter to turn on the GPS to let her know where she is; Lara gave a smartphone to her son, who is not particularly interested in the device; although she does not really want him to use it, she wants to know where he is, for example when they are skiing. So she takes care to charge the batteries and put the phone in his pocket. A Portuguese father of a 10 year old boy explains to other parents less familiar with smartphones that geolocation may assure a *"broader parental control".*

The Danish father of three boys introduces a different perspective. He often uses the function Find-my-iPhone to see where his older children are. One time he had to pick up his son, Nikolas, because he left work earlier – but he could see online that Nikolas had already got home before him. He thinks it's okay if Nikolas wants to turn the data off when he turns 15 – to avoid his father tracking him.

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[16] See also Section 3.5 earlier for a discussion of families and the digital leash.

However, an Italian mother says that from her house she can see when her son (12-15 year old) arrives at school, *"so there is no need for a smartphone to check up on him"*.

5.2.4 Prolonging childhood and a digital baby sitter

Across countries, some parents justify their resistance to providing technology to children as a way of prolonging their childhood. Afonso, a Portuguese father says his 10 year old daughter is not yet ready to have a smartphone:

Afonso: she needs time before a full entrance into the cyber world, time to grow up, to live her childhood before a too fast pre-adolescence.
(Father, girl 10, Portugal)

In the focus groups, parents tend to express their good parenting differencing themselves from other parents who use technology to compensate their lack of time to support their children.

Lorenzo: Parents not involved in the education of their children usually see digital devices as baby sitters, something used to make their children quiet.'
(Father, Italy)

And

Abel: Smartphones are given to children as toys because parents don't spend enough time with them… a smartphone makes the child quiet, focused on it…'
(Father, Portugal)

A good motivation for buying a tablet is that it may be shared within the family. Some parents appreciate tablets because they are cheaper than laptops. Parents value the educational games and apps, and some add that tablets are easier to be blocked and filtered, compared to smartphones. Thus, tablets combine parental control, leisure and availability. Elsa, a Portuguese mother, plays games with her 12-year-old daughter; she also checks information with the children about films or suggestions for outdoors family programmes. In sum, she says *"these are really good family moments."*

Illustrating "travelling together apart," Alessandro, the Italian father of two adolescents, is happy to let his children use their own tablets while he is driving. He

feels that he can finally he can go back to talking with his wife, listening to the radio:

Alessandro: 'One positive thing about tablets is that they download movies and when we do car trips they are silent [laughing]!'
(Father, 2 children, Italy)

5.3 Challenges

José Alberto Simões

The focus of this section is on the challenges introduced mainly by mobile devices (tablets and smartphones) and wireless and mobile internet access on mediation practices by parents. The three general issues discussed are not meant to be exhaustive, although they cover a wide range of concerns that appear one way or another in children's and parents' discourses.

5.3.1 Trust, surveillance and privacy

The issue of trust between parents and children is central to understanding parental mediation, more specifically in regard to how particular rules are defined by parents and ultimately accepted (or contested) by children. Different monitoring strategies adopted by parents (from installing particular software to checking children's online activity) are not only a form of surveillance and control but also a way of limiting children's privacy. How can parents' responsibility to mediate be balanced with children's right to privacy?

There is no consensual answer to this question, since it depends on different approaches to online mediation, which are related to parents own experiences and views about technology (in general and in relation to mobile devices in particular) and with different styles of parenting and other broader cultural and contextual influences.

Parents try to deal with the complexity of a convergent and mobile media environment, which is, apparently, no longer "under control", by adopting multiple strategies of mediation, including monitoring strategies that intensify surveillance (Pasquier et al., 2012). However, these different strategies of

monitoring (from explicit to furtive) might lead to children's own strategies of concealment by employing multiple tactics to evade parents' control (Livingstone and Bober, 2006; Livingstone, 2007).

In the interviews and focus groups children's accounts reflect the tension between trust and surveillance, and also of privacy (the right to, or breach of privacy), which are reflected in children's and parents' discourses.

From the children's points of view of children, different types of justifications are presented:

- **Acceptance:** some children accept parental surveillance, whether they think (or agree) they need it, or because they do not have an alternative, since it is their parents' prerogative. This is clear, for instance, in Martina's account, a 10 year old girl from Belgian:

  Martina: My parents check my messages, on Facetime. Every month. Actually I don't mind, because I used to send nasty messages to my cousin Louise. It was more like a joke…
  (girl, 10, Belgium)

- **Non acceptance:** children feel bothered by parents' surveillance, especially if it is done furtively. This is also something apparent in Kaat's comment, a 13-year-old girl from Belgium, referring to her need for privacy:

  Kaat: I don't like it when my mom sees these things [Facebook comment]. I don't do bad things, but I don't want them to know everything about me. When they pass by and they always ask 'who is this', then I'm thinking 'go away!'. Some things are private.
  (girl, 13, Belgium)

- **Strategies of concealment:** children try to avoid parental surveillance, by adopting several tactics to evade parents' control (from going online without parents knowing to protection of mobile device with password). These tactics might also include using the internet without parents' knowledge, as we can see in Geoffrey's remark, a 13 year old boy from Belgian, commenting on a WiFi turn off system mention by another boy:

  Geoffrey: Actually… parents are very stupid. Because I

know my neighbour's WiFi password. My parents always tell they will turn off the WiFi. But… I know my parent's password… so I can go online anyway. Because, my bedroom is next to their house, my room is right next to their office!
(boy, 13, Belgium)

The key challenge for parental mediation is trying to balance intended protection (from problematic situations) with children's freedom to experiment (maximizing opportunities), avoiding the risk of overprotecting children or betraying their trust. In the interviews and focus groups children reveal their knowledge about their parents' practices and integrate their concerns in their own accounts.

Mobile devices and wireless and 3/4G internet have enhanced the challenges mention above. In the particular case of smartphones, its most obvious characteristic – mobility – allows a highly individualised use in different circumstances, creating a "privatised sphere" even within the home thus making it **harder for parents to control what their child is doing.** We can see these tensions referred to above in the conversation between three Portuguese parents: Irene, who is 40 and works as an assistant manager and has two children (12 and 14), Cesar, 46, who is an architect and father of two children (12 and 16), and Alice, 45, who is a librarian and mother of three children (11, 14 and 17):

Irene: Yes, it is more difficult to control something that they have on their pockets, we have to ask 'hand me your mobile phone so that I can know what you were doing'. It is a breach of …
Cesar: …Privacy?
Irene: …Privacy of the kids. When they are at the computer it is easier to take a peek and to see what they were looking at by searching the browser history records, and as the devices get smaller it is more difficult to know what they are doing.
Alice: If I want I can look at my daughter's messages [the daughter is 14]. She does not even reply, she has to show me, I think that we can control whatever we want to control, I mean… I know that they can delete whatever they want and we don´t get to see it, but I don´t have a problem about breaking into her privacy, I have to see and that is that, she does not have to say anything about this. In the computer is easier, I can track down what they were doing, but in the tablet I don't know. The tablet is not as easy to use as the computer.
(Father, Mothers, children 11-17, Portugal)

In the case of parents, three main justifications also

appear in their discourses, some of which were present in the quote above:

- **Trust**: parents who claim to trust their children ("I trust my child, so I don't need any specific rules…"), which in some cases might also mean dismissing any kind of mediation and transferring responsibility to the child.

- **Distrust** – parents show concern or claim to be aware of risks and therefore try to implement different strategies of control and surveillance, some of which are invasive, raising the issue of privacy.

- **Negotiation** – parents who try to negotiate with children in order to implement rules, adapting them to situations in which it is possible to compromise. Nevertheless, there is an imbalance in this negotiation since generally the terms are defined by parents ("I accept that my child does this if I can be in control.").

Among the most referred to factors that have a simultaneously mediating role on mediation itself and are a challenge and a concern for parents, is children's age or (the real concern) the child's maturity to be engaged in a particular activity or experience. Nicola, a 10-year-old Italian boy, explains how her parents stopped using filters on their devices:

Nicola: They put … what is their name, filters? Like, things that show how much you stay, what you do (on the iPad), but they disconnected it immediately because they say we are grownups now.
(boy, 10, Italy)

This is an issue that cuts across different topics identified as challenges but that is particularly prominent in the case surveillance and trust.

5.3.2 Advice and skills

Challenges related to skills and advice/help that might be provided to children are directly related with parents' own knowledge and experience with different technologies. In this regard the challenges that we may identify are related, on the one hand, with the provider/ receiver of a particular advice/help and, on the other hand, the way their skills are acknowledged.

In the case of children, asking for help about the use of particular devices or apps is one of the most common ways this exchange takes place. This happens with children of different ages, but particularly with younger ones, who are less experienced and lack more digital skills, as they are usually on the initial steps of the "ladder of opportunities" (Livingstone & Helsper, 2007). Anita, a nine-year-old Italian girl, refers to her mother's help in the following terms:

Anita: My mom shows me exactly where I have to type and then she says… Because when you click then you see several things that you can click and give you different things, (so) she tells me the right one and I have to click it.
(girl, 9, Italy)

There are differences according to parental knowledge about specific devices (which may also be regarded as a potential challenge) and also according to children's age, which might , in some cases, explain the lack of particular competencies. Specific help or advice concerning safety issues (online privacy, contact with strangers, etc.) follow a similar pattern, which is also recognised by the children.

Some parents admit that their lack of skills to help their children with these issues constitutes a major challenge, either related to a specific device or to online applications/ platforms. Joaquim, a 52 years old teacher, describes his knowledge about parents' lack of awareness of the implications of allowing their children to create an email account for them:

Joaquim: I have 2 or 3 kids that created their parents emails, they are the ones that control the internet at home. I try to warn the parents 'if João or Maria or Jaime created the email they have the password, you should at least change the password, otherwise they have access to it and to any information that I try to send to you, they will see everything …
(Teacher, Portugal)

This problem is intensified by mobile devices, which parents considered more complicated and harder to handle. Technically parents note the complexity of smartphones when compared to old computers or even tablets. Socioeconomic and background issues might partially explain some of these differences.

5.4 Rules

Claudia Lampert & José Alberto Simões

Rules cannot be regarded as "static entities", they are defined and accepted (or defied) but nevertheless involve some level of negotiation. This means that we have to take into account its dynamics which constitutes a challenge to parental mediation. Some parents do not want to set up strict rules or do not see the necessity, because their child's media has never caused problems, while others emphasise the necessity and obligation of parents to mediate internet use – also by setting rules. Furthermore, **considering that mobile devices and wireless and 3/4G access to the internet have altered the conditions under which different mediation strategies may be implemented, it can be difficult for parents to make sure that particular rules are followed**.

Moreover, **some parents do not seem to be able to set up rules, because they are not familiar with the technologies** – or in the words of a Danish girl *"they are really bad at smartphones"* – and do not have any knowledge of risks, setting options etc.

So the challenge at stake is how to define situations in which it is appropriate (or not) to use a device or to undertake an activity. Several tensions emerge from situations in which using a device is not allowed. This is particularly evident in the case of smartphones, given their obvious portability. **In general, parents consider mobile devices harder to control, not only with regard to when they are used but also to how they might be used.** Francisco and Elsa, two Portuguese parents of young teens (11-13), who usually check their children's online record on the computer, and who they believe know nothing about this, regret that the new smartphones don't allow this surveillance, *"this is a dilemma for us, for sure…"*.

The "struggle" between work and play is usually present in the way rules are defined:

Andrea: And so, sometimes my father says that I need to turn on the 'Do not disturb', so then I can concentrate on my homework. And I must say I do that most of the time, so I can get it done quickly and stuff like that.
(boy, 14, Denmark)

As practices and contexts change, so do rules adapting themselves to different moments and situations. The challenge in this case would be to manage continuity with change without affecting the rule's purpose. Nevertheless, in children's discourses the problem has to do with the fact that rules don't remain the same or are not entirely clear. John, a nine-year-old boy from the UK, mentions precisely the uncertain nature of his parents' rules:

John: They haven't said that I can take it [the tablet] anywhere yet, but they did let me take it to the bowling place, because that was my birthday. So I think it was just because of that, but I don't really know. Except I can't use it on Mondays, Wednesdays and Thursdays…
(boy, 9, UK)

For parents, a major challenge has to do with how rules may be kept, which implies that they are followed through by children for a particular period of time. Jannette, a British mother of three (9, 11 and 13), talks about how the rule forbidding internet use on weekdays has changed:

Janette: No, they usually can't use it during the week anyway but we'd relaxed the rule, and their behaviour deteriorated, and now it's gone for a considerable period.
(Mother, 9-13, UK)

Depending on the rules (and the situations) that revolve around them, this problem might assume more or less wide implications. This might explain why parents also engage in negotiating rules with children regarding what activities (apps/platforms) are allowed and when.

In addition children confirm that parents often give advice on how to behave adequately online to prevent risks and negative consequences

Klara: I say to my children they have to be careful with pictures. And I ask them not to tag me, I think that's very important. They are allowed to post pictures, things about themselves, but they should ask permission to others if they are in the pictures. I think they understood this rule, although I don't know if they always did.
(Belgian mother of 16 year old boy)

As the interviews of both parents and children illustrate, children are generally not actively involved in the mediation process. It seems to be common practice that parents set up rules that the children

have to accept.

Rules can be differentiated regarding different aspects (time, location and situation) and regarding the level of differentiation (e.g., internet use in general, different applications such as Facebook and other SNSs, or different activities like posting pictures). For example, some children are not allowed to play violent videogames or download apps that cost money. If they want to download something they generally have to ask their parents for permission. **Rules regarding content** were mentioned quite rarely and mostly in relation to violent videogames or "inappropriate content", which encompasses sexual content, violence, bad language etc. This rule includes both the downloading and uploading of inappropriate content such as intimate, pictures.

Sara: My parents were angry because I posted photos and (also) they do not want me to write bad words and maybe I did write them, and also I had a photo in which I did the middle finger and they got mad and they made me delete Facebook .
(girl, 14-16, Italy)

 Rules regarding time are seen as an important tool to regulate media consumption, but due to the diversification of devices and programmes and with regard to different age groups it is quite complicated for parents to find the right level. Some parents set a general limit for all screen media, while others try to limit the time for each single device. The limit seems to be set intuitively and individually without considering the characteristics and affordances of the particular media. A 10-year- old girl from Italy described:
Giada: I play, like… sometimes… three quarters of an hour and my mom wants that I play half an hour, like half an hour a day and I play more so she says 'You pass the limit that I set' and so she put me in punishment and the following day I cannot play. The extra time I spent online, she takes me that away for the following day.
(girl, 10, Italy)

Apart from limiting the amount of time using mobile devices, as noted in chapter 2, some parents explain that children have to switch off the smartphone and tablets at certain times, like at 8 or 9 pm and/or during the night (and/or to leave it outside the bedroom, see below). Some Irish children mentioned that their parents switch of the router during the night and

parents from Belgium and Romania mentioned that their children are not allowed to take the mobile or smartphone into their bedrooms.

Saskia: They are not allowed to take up their mobiles to their bedrooms at night. They don't agree, and they say we overreact, but they try to adapt to the rule. They believe we are too strict, because many of their friends are allowed to do so. But we don't have real fights over this. They know it's the rule. And if they break the rule and I notice it, their mobile is confiscated for a day.
(Belgian mother of 16 year old girl)

Different perspectives can be found regarding the use of smartphones in schools. While some parents support the school rule that smartphones are not allowed in schools, others complain that their children are not available to receive their calls.

Children from the UK mention that they are not allowed to take the tablet outside the home and also that smartphones should not be used in public, because their parents are afraid that it may be stolen.

Typically children are not allowed to use their smartphones at dinner. Children also allude to homework and good weather as typical situations in which they are not allowed to use the media as they would like.

Most rules relating to specific social behaviour seem to be warnings about what children should not do. Parents tell their children not to post provocative photos or personal details, while personal communication is less considered. However, mothers from Romania stressed that parents are the most responsible for teaching their children how to use the internet and the social rules of the internet.

Although many children and parents state that they do not have rules for mobile devices, it is mentioned quite often that **parents control the smartphones** and look at what kind of pictures the children uploaded onto Instagram or WhatsApp.

Consistency of rules within families and between friends, peer groups and siblings is a challenge for parents. Ellen from Belgium points to the different rules she encounters:

Ellen: Actually I don't use the computer a lot, I do everything on my mobile phone. At my mom's I'm not allowed to use it at the dinner table. At my dad's it's sometimes allowed, because he does this himself sometimes. When my homework is done, I can go online as long as I want.
(girl, 12-13, Belgium)

Apart from consistency parents also assess that **rules are not ubiquitous or set forever, but always have to be adapted with regard to the preconditions and also the development of the child.**

Ellen: As a parent you should take care they don't overuse it, but rules can become less strict when you see they don't misuse it. If you see they use it in a responsible way, it's not necessary anymore to set time limits.
(Belgian mother of a 15 year old boy and a 16 year old girl)

Most parents seem to agree that **the older the children become, the less they are able to regulate media use and the more trust they need to have in their children.** As an Italian mother said: *"There are rules and as parents we have to make children obey these rules- until a certain age."*

Greta: You can't say, these are the rules for now until forever. You have to change, and see what can happen. Or how they bypass things. So I mean…there will always be new things, things you don't think about as a parent in the beginning.
(mother of a 13 year old boy, Belgium)

Compliance with rules appears to be more successful with for younger children in whom parents seem to have more trust. '*The child knows the rules and follows the rules.*' (Portuguese Parents of 9 to 10-year-old children)

But with the increasing age of the child parents realise that they cannot control everything. Both parents and children mention examples that children broke or "bypassed" showing that the rules are not seen as mandatory.

Louis: It's hard for parents to control online activities, because you can go online with your smartphone via WiFi. And if parents want to shut down the connection at night, you can still use 3G.
(boy, 15-16 years, Belgium)

Compliance refers not only to the child, but also to the parents. Children mention that parents often break rules, for example by using the smartphone

themselves during meal times. An Italian mother admits that she felt guilty, because she does not allow smartphone use during dinner, but used it to keep her child quiet in a restaurant.

In interviews with parents from Romania, interviewees complain that parents themselves do not respect the school rules when they call them during school time. Parents' behaviour might give children the impression that compliance of rules is not really necessary and emphasising the role model function of parents, which the parents themselves do not always seem to be aware of.

5.5. Conclusions

This chapter has highlighted how the decision to provide children with a smartphone or a tablet lies in, and is shaped by different family cultures. While some parents are enthusiastic users of ICTs themselves, and so are happy to equip their child with the newest technological devices, others problematise this choice and argue whether the children are mature enough to use such a device safely. Sometimes parents are also guided by the desire to give their children what their peers have. Indeed, just as with any other consumer good, smartphones are tokens in the parent-child relationship and the peer-to-peer relationships. Not surprisingly, parents and children have conflicting understandings of mobile communication: an electronic leash for parents, or a tool for constant communication with peers for children.

This chapter also examines the issues of trust at play when parents mediate their children's use of the mobile internet. The adoption of monitoring strategies and/or technical tools might ensure children's safety to the detriment of their privacy, as parents themselves recognise. On the other hand, the portability of mobile devices makes it easier for children to refuse or avoid parental mediation – sometimes helped if children are more skilled than their parents at using these devices.

Poor familiarity with technology also compromises parents' ability to set rules to limit children's use of smartphones and tablets. Rules regarding place and

time of use are perceived by parents as efficient ways to regulate children's use, but can be a source of conflicts and tension among family members. Another issue raised by parents and children relates to consistency of rules: sometimes mothers and fathers adopt different, and contrasting, rules regarding smartphone use. Finally the efficacy of rules is age-dependent: younger children are more likely to comply with rules than teenagers.

6 Teachers and schools

6.1 Introduction

Anca Velicu & Marina Micheli

There are many reasons why school is such an important place for children. Not only do they spend more than a quarter of their days within the school walls, but also the interactions they have with their classmates, teachers, and all the information received at school, potentially influences them as much as parents and family.

Technologies are now highly present in schools – both because of school investment in ICTs and because of children owning personal digital devices (European Schoolnet, 2013). In recent years the popularity of mobile devices has changed the nature of schools, challenging the work of teachers even more especially because these tools are often in the children's and not their teacher's control (Richardson, 2013). Overall internet use in class can be a great opportunity for teachers and students allowing access to a vast amount of information, news, videos, and so on even if not inherently positive (see Selwyn, 2012). In any case, school is the place in which students can experience (some of them for the first time) the educational and cultural value of the internet and the digital technologies used to access it. In addition to parents, teachers and school principals are also involved in the task of mediating children's use of digital technologies. As educators, they have the important responsibility of teaching (at least basic) digital skills and promoting a safer, responsible and constructive internet use (O'Neill et al., 2014; Livingstone, 2012).

In this chapter we want to go beyond the normative discourse on how schools *could* or *should* use digital technologies in class to focus on what actually happens in European schools according to perceptions and experiences of the involved actors (students, teachers and parents).

The chapter is structured in the following three sections:

- **Regulation of smartphones and other mobile devices** in schools brought in by students for non-educational purposes. The section explores how these devices are changing the 'experience of the classroom', how teachers attempt to regulate them and children's eagerness either to comply with or to contest these rules.

- **Teachers mediation of risk situations**. This section analyses what teachers do in a negative situation that involves mobile internet (if they take action) and how effective the mediation is according to children and parents.

- **Internet and mobile media educational opportunities in class**. The section explores the pros and cons of using mobile devices in class and the challenges that teachers and schools have to confront: the level of teachers' digital skills, plagiarism and potential inequalities. The second part of the section highlights the benefits and challenges of technology use in class by analysing concrete examples.

6.2 Smartphones in class: rules and 'hidden' uses

Marina Micheli

The portability of smartphones and children's strong attachment to their devices are rapidly changing the 'climate' of European classrooms and schools. Irrespective of the level of digitalisation in schools', in every school there are lively debates among children, teachers and parents regarding smartphones, tablets and mobile phones regulation. The Net Children go Mobile survey (Mascheroni & Ólafsson, 2014) showed that around 64% of schools have a wifi internet network, and that they are more common in high schools (74%) than primary schools (44%). In the 'connected' schools, however, students very rarely have free access (without restrictions) to wifi internet (16%, most of them in Denmark). Hence, **students' personal devices represent a quick and fast**

solution to access the internet bypassing the schools' infrastructure, limitations and rules. While the majority of tablets still need a wifi network to go online, many smartphones can access the internet autonomously through 3/4G network connections. Additionally, smartphones (like mobile phones, but differently from tablets) allow students to easily communicate by texts and phone calls even while at school. On top of that students particularly appreciate **smartphones because they are small and easy to use without being noticed by teachers.** These features ('always on' internet connection, telephone line, extreme portability) make the smartphone particularly appealing for students to be carried at school and, at the same time, particularly **difficult to manage for teachers**.

Giuseppe: On the negative side (…) I always observe my students and I see that their arrangement in class it is always the same: they keep something in front of them in a way that from the desk or the blackboard it is not possible to see what is going on. It could also be the pencil case, but behind the pencil case there is a tiny silent thing, a tiny thing that allows them to escape if they are not interested in us.
(teachers, Italy)

This section refers mainly to smartphones because tablets are mostly only used in schools within specific projects for ICT and teaching (see Section 6.4 later). Moreover, tablets are more rarely brought to school because students do not want to risk damaging them, and for 'undercover' use smartphones are more practical.

6.2.1 Empowering to students

With the diffusion of smartphones in schools (at the students' initiative) the context of the classroom is undergoing substantial transformation. Both students and teachers report an increasing amount of interruptions that sometimes make it difficult to follow the lesson. **One interruption involves the phone ringing in the middle of the lesson. Students also complain about classmates watching video clips next to them, and admit feeling the need to check their phones once in a while.**

Emil: A lot of students check Facebook, watch videos etc., in class so it has become the biggest problem.
(boy, 14, Denmark).

Sara: At school? I use it anyway. I have been caught using my phone and it has been confiscated, but [laughing] it is stronger than me I cannot avoid replying to messages.
(girl, 15, Italy)

There are even worse interruptions, such as the case of an Italian student who suddenly started crying during a lesson because of a text she had received. These disruptions could be understood as a new phenomenon: the "outside world" is now entering the classroom. The availability of smartphones (and the external inputs they bring into the class) is provoking big changes in the relationship between students and teachers. **Students have gained some new power** that teachers need to comprehend - accepting, but also limiting it when not appropriate. The new power students have gained thanks to smartphones is addressed towards very different ends, such as:

- integrating, verifying and challenging what teachers are saying during their lessons;

- denouncing teachers' behaviour when something is wrong;

- ridiculing and bullying teachers online;

- communicating with parents, bypassing teachers and institutions.

Susan, who works in a UK primary school, as a teaching assistant described a situation to her secondary school teaching colleagues:

Susan: Do you find parents get involved as well? Because we're having this on the playground, if the children are arguing, the parents then get in and argue, texting, and so the parents, some of them have been called in by the head, because the head's being mentioned in these texts or whatever, or a teacher, and so…yes, and then they get shown these messages, and so the teacher is beside themselves, because they know how this parent feels, so it goes on and on and on.
(Teaching Assistant, Primary School, UK)

One of the most **positive** implications of the presence of smartphones in class, however, is surely the way they let **students access external information,**

news, data, images and other relevant materials during lessons. Teachers can ask them to do so, but it can also come from their own initiative. Overall it can produce a more engaging type of lesson.

Sara: They [students] look online for validations. They keep searching… They verify what you say searching online, to see if they, in some way, find confirmations or not. And this is interesting. It opens up connections, stimulates much more complex discussions. It is like in the class, instead of being just you and your students, there is you and also a whole new series of subjects. It is much more tiring, much more demanding, but also more challenging.
(Teacher, Italy)

However, there is evidence of smartphones and apps being used **to record and to ridicule teachers**. In fact, smartphone use during class can seriously **undermine teachers' institutional role and authority**.

Carla: There is an application that allows using the same tone of voice and changing what the teacher said in class.
(girl, 11-13, Portugal)

Bianca: There are people who take pictures of teachers… Yes, perhaps it is a peculiar guy, for example in lower secondary school there was this weird teacher and so I took a picture and posted it on Facebook.
(girls, 14-16, Italy)

Finally, one of the most recurrent and relevant features regarding students and teachers changing relationship is the i**ncreasing presence of parents in students' lives (even at school)**. Being able to be in constant touch with their parents is one of the main reasons the youngest children in primary school give for wanting to bring a smartphone to school. This is consistent with the phenomenon of "hyper-involved parenting" (Nelson, 2010), described earlier in Section 3.2. There we saw how teachers refer to this as a way of using smartphones as an "umbilical cord" and perceive it as a **highly problematic behaviour because it threatens their educational and institutional role.**

Florica: The school rules forbid the use of the phones, but the moment you come to school, things tend to change. For example, when in breaks, children call their parents. (…) So, one problem is that the parents don't respect the school's rules. This problem is a bottom-up issue. So, you take your child to school, you turn off his phone and you tell him not to *turn it on until 12 o'clock, when the classes end, but sadly, this thing doesn't happen. So, what could you do, as a teacher? You cannot take 30 phones and turn them all off every day. In the end, it all comes down to the home education.*
(mother and teacher, Romania)

Sara: Parents themselves call them during school hours, you understand? They are a physical presence and (…) it says something about the mentality and the experience of our students that are at school but always in contact with other contexts.
(Teacher, Italy)

Indeed, children often acknowledge having broken school rules precisely to call their parents. For example, Linda (13-14, Germany) understands that playing and texting on the smartphone is forbidden in school, but she finds it hard not to answer a phone call from her mother, because it could be important.

Tangible proof of the increasing presence of parents (thanks to smartphones) is the fact that **students frequently 'bypass' the teacher and the school administration office and call their parents when they are feeling sick**. Teachers find parents already in the school entrance wanting to take their children home, without even knowing they were not feeling well in the first place.

Smartphones give more agency to students opening their classroom to the external world. Overall, this new scenario changes the relationship between students and teachers because their bond is no longer confined and "legitimated" by their sharing of the same "private" space of a classroom.

6.2.2 Rules, concessions and exceptions

In the Net Children Go Mobile survey (Mascheroni & Ólafsson, 2014) 54% of children said they are not allowed to use their smartphones at school and another 31% were allowed but with some restrictions. Hence, the majority of students have to respect some rules regarding the use of smartphones within school. Our qualitative data shows a very complicated picture regarding what these rules actually are and how they are communicated to students. When explaining their school policy, students admitted to being confused or

described a chaotic scenario.

Typically the use of smartphones is forbidden, but with some concessions. Exceptions of the "No smartphone rule" are many and wide-ranging going from: where and when it is okay to use the devices in the school, to what specific activity or function is allowed (or banned), with which teacher, in what moment of the lesson or the day and more.

Often children (especially younger ones) are allowed to use their smartphone only before and after school hours – and in some cases during breaks. This rule exists because teachers are aware that is not possible to ask students to not bring the devices at all, often because parents want to be able to reach them when they leave school (see Section 3.2), and the children like to keep in contact with their friends. Sometimes, children have to **put their smartphones in a box or a container** and leave it there until the end of the school day (or during breaks).

Sebastian: After Easter, or something like that, we have gotten something called "parking lot" where we can go and put our mobiles, so it's like being held in place, right? During class, and then we can take it back in the breaks.
(Boy, 11-13, Denmark).

However, it is increasing difficult, especially for older children, for teachers to detach them from their devices. And some are sceptical about the security of these storage boxes' for their expensive smartphones. **Teachers** therefore **tend to be flexible and make concessions**. For example, in a Romanian class, since the rule of locking a smartphone away (in 'the monkeys box', as they called it) was not followed, the norm was changed so that students only had to do it during tests. Teachers' concessions sometimes focus only on specific features and uses. The scenarios vary and, what is probably most striking is that **different teachers of the same student can set different rules and hold diverging approaches regarding the role of smartphones' in class**:

Jeff: Actually it depends. On the playground it's allowed now [using smartphones]. Since this year, you can listen to music with your earphones. So…it's not really mobile… nor internet. But yeah, previously this was not allowed, and now it is. In the corridors, it depends. If you cross for example teacher A, and you have your mobile in your hand, he would confiscate it. But, if you would for example cross teacher B, he wouldn't reprimand you. So yeah, actually it depends on

who you encounter.
(Boy, 15-16, Belgium)

Daniela: Usually in schools smartphones are forbidden, but then it depends, because there are teachers who forbid them in words and in real, those who forbid them in words but not really, who pretend not to see anything, there is a wide range of solutions.
(youth worker, Italy)

To add **another level of confusion**, students talk about "special days" in which they are allowed to bring, and freely use, smartphones or tablets at school. These days – referred to as "internet days", "the day after your sacrament" for example – can be one particular initiative of media education. Overall students seem to perceive them as a sort of a prize and something extraordinary, so they are probably not helpful in educating about mobile device use outside of the home. Generally, students seem to struggle to really comprehend what their school rules are and, most importantly, what their real meaning is. Sometimes they think teachers simply do not want to find them using their smartphones, but it is acceptable if they are able to do it without being noticed.

6.2.3 Breaking rules and punishments

Of course not all students comply with the rules and it is likely that overly severe or complicated rules may prompt incorrect behaviour

Daniel: Phone? No, we are not allowed to bring it… Well you can bring it, but you can't use it. If teachers saw it they will take it away. But I know many other people bring their phone in, but they use it when we have break, some guys showed us some photos or funny things when we are on our break
(boy, 10, Ireland)

Most often, **students break the rules because they forget to turn off their ring-tones, they send texts, visit and check SNSs secretly or play video games** (both in class and in the toilets). Occasionally they also accomplish something more advanced: for example in Portugal a student was able to find out the WiFi password thanks to his mother working in the school, while in Romania and Germany some students used their own personal devices to create an

open WiFi hotspot for all their classmates. It is also worth noting that in many countries, some students seem to violate rules not because they really want to use their devices, but only because they want to defy their teachers.

Aingeru: There are people who don't switch off their smartphones in class (…). Sometimes some people take their phones out when the teacher goes out, and you say: What are you doing? And they say "Nothing, I'm bored". They think they are important because they do that.
(Boy, 11-13, Spain)

Two German girls describe how some children, and the boys especially, disrupt their class by playing with phones and teasing the teacher. In Linda's opinion (girls, 13-14, Germany) boys play more with smartphones during lessons. Kristine adds that the boys sometimes fake playing with smartphones, for example, with a big rubber or ruler under the table, just to play a joke on the teacher.

Teachers' reactions to students' infractions are very diverse (as they are for rules). A punitive approach prevails in which **teachers confiscate students' smartphones** and this happens in very different ways. While confiscating the smartphone just for a single class is a common mild punishment, stronger measures are also used. For example, teachers keep the phones for a day, a week or longer in a few cases, students talked about one month-long sequestrations. A couple of children (in Ireland and Romania) also mention receiving a monetary fine:

Sean: During the day if they catch you they take it off you and you would have to pay €20 to get it back, so people don't tend to risk actually using their phone.
(Boy, 14-16, Ireland)

When confiscating their students' phones, teachers usually involve parents and occasionally school principals. Of course a teacher-parent cooperation is essential in order for many of such punishments to exist. **A common procedure is asking parents to come to school and to retrieve their children's confiscated phone**. This procedure is also used for students repeating the same infraction several times. Indeed, some teachers set harsher punishments with even longer periods of confiscation.

Iratxe: If you are caught with the mobile or it is found on your

table the teachers take it away for a week and your parents have to come to get it back. If it happens a second time it is kept for two weeks, and for the third time it would be kept at school until the end of the academic year.
(Girl, 14 – 16, Spain)

Notwithstanding its popularity, the habit of **confiscating smartphones is very problematic for teachers**. In general, this intervention goes beyond teachers own responsibilities and blurs the boundaries of what they should and should not do.

• Are they really entitled to confiscate students' phones?

• Where should they put these prized and expensive devices?

• What if something happens to the devices while they are confiscated?

• Can students (and parents) blame the teachers for breaking or losing their smartphones?

As these questions show, teachers have to face a completely **new set of issues when they start confiscating phones**. One particular issue is also related to students' attachment to their smartphones, as the following quotes show, (similar experiences are also reported in the UK):

Amadeu: Some time ago I confiscated a mobile phone from a student and she panicked because it was Friday. She panicked because she could have stayed all weekend without the mobile phone. I gave it back because she was crying and I gave in, even if I shouldn't have done it, but she promised that she would never do it again.
(Teacher, Portugal)

Joachim: Yes, it's a very severe punishment, confiscating their mobiles. Actually it hurts them more than what we intend to. Because if you confiscate the mobile…those children….it's really their instrument of their freedom and independence. So…I believe some of them would rather have a note in their agenda than having their phones confiscated for the day.
(Teacher, Belgium)

While these teachers from Portugal and Belgium express empathy for their students and feel bad for confiscating their phones, there are also a minority of teachers who seem to confiscate smartphones too hastily and without consideration of the students.

6.2.4 Students views about teachers' rules

The students' perspective about the use of technologies in schools is less often reported (for an example see Beckman, Bennett & Lockyer, 2014). One notable finding, however, concerns students' acknowledgement of the need for rules to govern these devices. **Students express a variety of views** on what is actually wrong about smartphone use in school, **but still agree it is important to set rules.** For example, a group of Portuguese girls stated that it is very different using a smartphone while the teachers are explaining a new subject or when you are really working, compared to when students are doing training exercises or nothing in particular (Portugal, 14-16-years-old). Nevertheless, there is a shared agreement about the importance of regulating smartphone use in class.

Andrea: So, there should be some rules on how much we have to use it, I think. But it must be like ... we also just like to check it sometimes. I understand you probably should not use it when you are training, in school and when you sit and eat and stuff. I think, I think there you should probably not use it. It's like ...that way you don't get a lot out of teaching.
(Girl, 14-16 , Denmark)

When children clarify why it is important to regulate smartphones in class they provide really harsh (and sometimes worrying) reasons. Overall, **many children understand that smartphones can interfere with attention** making learning more difficult. This is a recurrent theme, as imany students almost see a disjunction between smartphone use and attention.

Rafael: I think it (the rule) is good. Otherwise children would only text during class, and they would become stupid
(boys 9-11, Belgium)

Chloe: Yes, at this school you have to have sign in to get WiFi access, it's good because sometime you can use it for class, but not all the time because if people get access to internet, they would all be on Facebook, twitter and it's not going to work if that..
(girl, 11-13, Ireland)

It is striking how **children often admit to not being able to control themselves if some rules are not set**; it is as if they are actually asking for teachers' mediation.

Silvia: Without that rule, everybody would be on the mobile!'
Sandra: And be at the class or not was the same
Silvia: Maybe this rule works; with freedom, we would be all time on the phone, we won't pay attention to the topics, we would be all time showing screens and it would be kind of a mess... on the other hand, I would like that the rule didn't exist....
(girls, 14-16, Portugal)

Additionally, some children think rules are reasonable because not checking their phone in class is a **matter of respect for teachers**.

Luke: As long as you respect the lesson by not taking it out. (..) at the end of the day you can leave school, you can call your parents but just don't take it out in lessons because that's disrespectful
(boy, 14-16, UK).

Hence some children think students should ask permission from their teacher before looking up information online during class, and should not cheat during homework or exams. Finally, young children point out another reason why rules are good: not every child has a mobile phone, a smartphone or a tablet. Social inequalities and different parenting styles can create resentment and isolation among classmates. In particular, **children explain the risk that students who do not own a device could be marginalised** and that students owning the most modern devices could "brag about it".

Rosalena: I think it's good that mobiles are not allowed at school. Some people talk bit because they have a mobile, and other don't have a mobile. Sometimes, we can take ipods to school. But, I feel that some people really talk big and brag about this, because they're allowed to take it to school.
(girl, 9-11, Belgium)

Whilst, on the one hand children agree with the need to regulate smartphones at school, on the other, they **would like more understanding from teachers.** They express a certain frustration about rules they believe are too strict and unreasonable. Overall children seem not to approve peremptory rules - they want to be guided and trusted at the same time. For example, Jens, an 11-year-old-boy in Denmark believes that the teachers should have more confidence and be more permissive. They should have more confidence that pupils will report and solve problems.

6.3 Coping with problematic situations at school

Maialen Garmendia & Paula Pineda

Coping with problematic online situations is a new challenge for schools and teachers. Looking at the data provided by the Net Children Go Mobile quantitative fieldwork, we can see how teachers engage in a variety of mediation activities, including providing practical guidance and restrictions (Mascheroni & Ólafsson, 2014, p. 103). But helping the students and their parents to cope with online problematic situations requires a big effort on the teacher's side, as well as needing the students' cooperation. We saw in the last section some examples of how the students managed difficult situations as well as whether or not they felt able to turn to their teachers for help when dealing with content generated by other users that bothered them.

Although the children interviewed did not mention it very frequently, when the circulation of negative user generated content does occur, it provides teachers with a good opportunity to give their students a safety or preventive talk. This was the case in a school in Denmark when someone had received some 'immoral Snapchats' from others and another in the UK as described by Ruth regarding the positive aspects of having a record of messages and images sent:

Ruth: In a way, it's good because you've got the evidence, whether it's Facebook or Snapchat or whatever, but on the other hand, they don't realise, the kids that send these messages don't realise how A, permanent and B, how many people can see them. I know when they had the assembly about social networking a couple of weeks ago, the Year 10s were all in a bit of a state that lunchtime, because of photos and stuff they knew they had on their personal accounts, and A, I said to them, you shouldn't have that sort of stuff on your account, but B, good you're scared because now you won't, maybe - but they will you know.
(Teacher, Secondary School ,UK)

Some Spanish girls also talked about someone sending an inappropriate video through the school Gmail account to her schoolmates' accounts her. Apparently, the children did not remember what the video was about, but, the teachers found out about it and asked the children to delete the video and tell them who had sent it in order to sanction that student.

Julieta: With Gmail, last year, a girl sent a video to the whole of sixth year and it wasn't appropriate for us. (…) And she got punished (…) I don't remember what it was. But they asked all of us to delete it and to tell them who had sent it to us.
(girl, 11-13, Spain)

Quite a common sanction at school is the confiscation of students' smartphones, although this is very effective considering how attached students are to their phones, as we have already seen in a previous section this is also a problematic solution.

Such was the case at a school in the UK where peers had their phones confiscated by the teacher for posting rude messages on WhatsApp: rude videos of a girl and children swearing at her:

Wilson: He basically took a video of this girl called, whatever, I can't remember, everyone knows and then I think, loads of people were talking about it and I think someone got expelled.
Interviewer: *What type of video was it?*
Wilson: *It was swearing and everything and then Mr XXXX found out and then got rid of it.*
Pranav: *It was searing at her, calling her rude names, like putting her down and things like that. And then someone showed them and MrXXXXX who's our Head of…*
(Boys, 11-13, UK)

6.3.1 Privacy issues

Data provided by the quantitative fieldwork revealed that among risks associated with personal data misuse, children are more likely to experience privacy-related risks on their smartphones (e.g. people accessing their personal information or pretending to be them). Although just a minority of children are exposed to this risk (5% overall), this rises to 9% of teenagers aged 15-16 (Mascheroni & Ólafsson , 2914, p.78).

The qualitative fieldwork supports these privacy-related risk experiences. Some incidents can be considered as "jokes" as recounted by a 10-year-old Romanian girl, about taking a picture with a smartphone of one of the naughtiest classmates

when he had his pants dragged down and half his bottom was hanging out. But in that case the teacher's reaction was very quick in order to get the situation solved. Apparently, he heard about it, took the phone off the boy who had taken the picture and deleted it. Afterwards, he talked to the parents of the boy who had taken the picture.

But, as the children reach their teens privacy issues reported by some of the children interviewed became more serious and solving them more difficult. For instance, some girls from Germany (13 to 14) told their teacher that some classmates had posted a video of themselves in the WhatsApp group that had bothered them. The boys were told off at school, but it had no effect and they kept on doing it. In the UK a 16-year-old girl explained an incident that had happened at her school:

Imogen: I've had a situation where someone's actually made a fake account to talk to me to… yes, they made a fake account and pretended to be someone else. I didn't know the person and kept messaging me and kept talking to me and stuff, and it was really weird because they knew all the things I was doing but obviously I had no idea who it was, and then I showed the account to my parents and it was clearly a fake account. It… I think when you're on there for long enough you know how to spot them. And we had to take it to school and show them because it was getting quite out of hand, and at the end of it I managed to figure out who it was because I'd tracked the location of it, which you can do on Facebook if their location services are on, and found out that it was actually someone in my year that I'd never spoken to before that was constantly messaging me, and my school actually dealt with it really badly and just told him not to do it again. I don't even think he closed the account, and ended up doing it again to other people, so…

Interviewer: So what do you think the school should have done? When you said they dealt with it badly, what do you think… what would you have liked…?
Imogen: Told him to shut down the account and that impersonating people is quite bad and it's… I don't think he took it seriously.
Eliza: Did he even get a detention?
Imogen: No, nothing.
Eliza: That's so bad.
Imogen: He didn't get anything. He didn't get sent home, he didn't get told off; nothing happened, so…
(girls, 16, UK)

The school rules related to the use of smartphones in

class or at school (seen in the previous section) try somehow to cope with students' dependency on their phones while trying to limit their use. We saw how for some teachers the most effective way to get the students to comply with such rules meant confiscating the phone, which highlights what appears for some to be a real addiction for some students to these devices:

Rachel: They're like alcoholics; it's that devious way, that the phones are so part of who they are and what they do, and how they socialise now, it's like losing an arm. It is, yes, so that if you say, you can't have it for a lesson, the amount of fuss I've had off students who you say, I'll give it back to you at the end of the lesson, or it's already at the end of the lesson, you'll have it back in however many minutes, and although they're not meant to have it out, the idea of not having it on their person is…
Kate: It's an addiction .
(Teachers, Secondary School, UK)

Gloria: What I see is that they can't separate from their smartphones, not even in class or in the hallways. Confiscating a phone is the best way to get a parent come to school to talk with teachers. It could be four years that the family is being contacted, but once the smartphone is confiscated they finally show up! So, I observe a true addiction, which scares me most!
(Teacher, Italy)

Sara: Do you mean at school? I use it anyway, I have been caught using my phone and it has been confiscated, but [laughing] it is stronger than me I cannot avoid replying to messages, because not replying…
(girl, 15, Italy)

So, students are quite aware of their own dependency upon their phones. And even if they sit together while eating, it does not necessarily mean they put their phones away.

Andrea: But we are still social with each other. For example us girls sit together when we eat.
(girl, 14-16, Denmark)

The corollary to this identified attachment to their smartphones is the impact of when they are actually lost or stolen at school rather than merely confiscated.

There are two examples given here that demonstrate **how schools have dealt with stolen mobile phones**. The first in Denmark links the theft to

managing a bullying situation.

Giuliana, a 12-year-old Italian girl had her smartphone stolen and asked the maths teacher to help her, but when they found out who had stolen it he persuaded Guiliana to forgive her, because this girl was a "bully" and had a lot of problems, and she would not have passed to the next grade. Other common friends persuaded the bully to return the phone, but she kept the memory card pretending it was her own. Giuliana was happy anyway, as the phone was much more expensive than the €50 she spent for memory card.

In the second example in a school in the UK, the teachers refused to investigate the theft because students are not allowed to have phones in school, although they were willing to support a police investigation.

Joshua: And then they couldn't report it. Well, they could report it ….but they couldn't investigate it because you're not allowed to have your phones in school anyway.
Luke: Yes the school says "We'll support a police investigation but we won't do our own."
(boys, 14-16, UK)

6.4 Using the mobile internet for school

Anca Velicu

One of the most visible arguments used by technophiles for permitting children's access to the mobile internet is the great opportunity it affords for education in school. However, there is a major gap between the potential and actual use of this technology in schools. Indeed, the Net Children Go Mobile survey showed that on a daily basis, only 26% of students use the internet to do research for school, 13% of children collaborate with other students over the internet for school related projects, and 6% use smartphones in class for different assignments (Mascheroni & Ólafsson, 2014). These low percentages raise questions:

- What are the arguments for and against use of the mobile internet in class?

- What are the challenges that smartphones and tablets bring for teachers, parents and children when used in class?

- What are the devices actually used for in class and who recommends them?

6.3.2 Pro and cons for using mobile technology in class

Some of the children, teachers' and parents' comments in interviews and focus groups seem to proffer more reasons for using mobile technology in school than avoiding it. **The pro arguments are also more diverse**, from health to ecological or psychological reasons.

Thus, from the parents' point of view, **replacing heavy dictionaries and other books with digital books that can be stored on a tablet is good for children's health** because "*in this way children don't have to carry five kilos of books daily*" (Romanian mother). Although taking notes on a digital mobile device could reduce the burden of the school bag, this only happens, (in Romania at least), with the approval of the school principal of the school and only for medical reasons, as was the case of the daughter of a teacher who had undergone back surgery. **Having digital and interactive books may also be very useful for dyslexic students,** argue Italian teachers, while Mario, an Italian boy with cognitive disabilities, uses his tablet at school on a daily base for taking notes.

The notion of going digital in class and allowing students to use **tablets and apps is also a method for involving students more**, especially those who are not so interested in school, believes an Italian 16-year-old boy, Fabio, who previously used an iPad in school. The advantages mentioned by some Romanian teachers, for example, are that **by obtaining information very quickly children's satisfaction and self-esteem increases which may encourage the child to go further in research**.

Examples of students' checking facts in real time were discussed earlier in this chapter, in Section 6.1; the information that teachers give them empowers children to be more engaged in the class, and it also allows teachers to be more involved and digitally

challenged:

Sara: Among the positive sides of smartphone use in class (…) is the incentive for teachers to update about technology. If the teacher doesn't know that with the smartphone, or any other mobile device that connects to the internet, that the translation can be found in two seconds, well, he is indeed screwed! Therefore teachers have to join the "new world" and understand that the old tests can't be assigned anymore
(Teacher, Italy)

The cons are fewer and tend to be more visible for some countries, Romania and, Italy especially, and in the UK where there are mixed experiences as recounted by these secondary school teachers:

Interviewer: Would it help at all if you had a policy to help you use the phones as part of the class experience?
Alex; No.
Iris: I think that works in very rare occasions. I know a school in Hampshire that is a flagship that has fully integrated use of phones and iPads. They've got the money, they've got the iPads that students can use, but also students can use their iPhones, their Smartphones in lessons, and it works really well, but I also have heard of a few other schools trying that, and it just bombs, so I think it's just at this one school it's worked.
(Teachers, Secondary School, UK)

Teachers are very keen to denounce students' copy andpaste habits and the alteration of students reading and/or writing that are both favoured by new ICTs and in particular by the internet and the mobile internet. **Plagiarism** is an issue for which teachers have had to develop strategies for combating as discussed later. **Some teachers claimed that writing skills have declined due to the generalisation of (incorrect) abbreviations** used initially in texting. For example, Alexandra, a Romanian teacher, strongly disapproves, saying :

Alexandra: They write 'ms' [instead of 'merci'], or 'pls' {instead of 'please',] …if someone gives me such a text I don't know if I'm able to… I also text, as you imagine, and I also use abbreviations, but not for all the words. There are not caps anymore for names, or dots, or commas.
(Teacher, Romania)

Secondary school teachers in the UK also discussed this point also:

Alex: We're losing fundamental skills, like you were saying

about the skill of conversation, you see families sitting on texting, and so they're not talking, they're losing that skill.
Ruth: Spelling, conversation, grammar.
Alex: You're losing the ability to write anything by hand, because...
Susan: We had one child who writes in text, doesn't write in full, English. It's ridiculous.
Kate: That's how he was taught, and that's how he wrote.
Ruth: That's one thing that smartphones are good for, because now it's easier to write properly, putting the punctuation in with a smartphone, and it's predictive text and stuff, so I've never written in predictive text. I've always done it longhand.
(Teachers, Secondary School, UK)

Abel, a Portuguese boy, admitted that he used to make mistakes in writing and so he received a negative evaluation at school. A Romanian teacher, Cornelia, considers that the problem is not in the alteration of writing skills, but in reading:

Cornelia: even though using the internet children are faster in writing, they read slower because they are not used to the words, but with images.
(Teacher, Romania).

As it is noted in the literature (Smahel & Wright, 2014), some parental concerns could be applied to all screen-based media. The time children spend with media, framed sometimes as an addiction problem or an eye strain problem, are the most notable, and are also to be found as arguments against using the mobile devices for educational purposes.. However, probably the most compelling argument against mobile device, mentioned equally by teachers, parents and children, is the **pre-conception that smartphones are for communication and entertainment and that they are not educational tools**:

Laura: They don't use smartphones for searching information. Basically they use smartphones for communicating. A superficial communication without pedagogical interest.
(Teacher, Portugal).

As mentioned previously, when school rules were discussed, children (especially younger children) tend to agree with prohibitive rules because they find smartphones disruptive in class. Nevertheless, some children advocate "anytime, anywhere" connectivity:

Ecaterina: If you don't understand something during the

class you just access the internet and you can find anything; the internet [and the phone] does not mean only Facebook, music and games.
(girl, Romanian, 11-13).

The **challenges** faced by the teachers in managing and mediating their students' use of digital devices are threefold:

• their own poor digital skills

• plagiarism

• the need to allow for equality of access for their students.

6.4.1 Teachers' digital skills

The lack of teachers' digital skills is a problem mentioned more frequently in Southern European countries than in the North. It proves to be an important obstacle in using digital technology in school. Thus, some Italian parents said that even though the school is equipped with technology, the teachers do not use it because they do not know how; or, as Monica, another Italian parent, said it is unacceptable that a child teaches a teacher how to do an online search, or, as teachers from a secondary school in the UK explained, show them how to overcome firewall difficulties:

Alex: 'I know they know how to get through the firewall in terms of YouTube. We're not allowed to access YouTube at school, the staff are, because it's quite useful for lots of lessons, but students are not. Suddenly the sixth formers will say, I can get access to it, and they just go, you go through here, you do this, that and the other, and there you go.
*Ruth: Any security setting is going to be cracked by teenagers, because they're the ones that are most savvy. I don't know about the IT support people, but even people who are really savvy are not like teenagers. They don't have that teenage wiliness of wanting to and needing to.
I need to access my Facebook, you know?
Alex: When I had the Snapchat issue, I went to the IT department and … I asked him, do you know about it? And he was, I've heard of it, but I don't know. And, it was a new director, he's about the same age, and he knew. He said, yes, I know about it, and he was able to point me in the right direction, but yes, you have to be really ten steps ahead [of the students].*

(Teachers, Secondary School UK)

Acknowledging that in fact **using mobile technology in class and teaching about ICTs are not always included in the curriculum but depend instead, on the teachers' initiative and openness** has been criticised by parents from Romania and Italy as well as by an Irish adolescent who said that "*It shouldn't be up to the teacher of the computer class to take the initiative and say I'm gonna do this with you. It should be part of the curriculum'*"

It is apparent from the interviews with teachers (and parents and carers) that it is not necessarily a deficiency in the teachers' digital/ICT skills but rather that there is a "lag" in acquiring them, as Clara, a Portuguese teacher said:

Clara: Everything is too fast, evolution is too fast and as soon as we adapt to something it is already changing, isn't it? (…) I sometimes feel that we cannot cope with this fast evolution. New technologies are present in the classrooms, we can see how easily kids deal with it and adapt to change, and we almost cannot cope with it.
(Teacher, Portugal)

Sometimes, and this can be seen in the above quote, (it was also observed by researchers during the Romanian interviews), teachers do not lack digital skills, but rather they lack the self-confidence that they can manage technology in the classroom. So, without denying that in some cases there is a real lack of teachers' digital competences it is also noted that many do have digital skills, but teachers are less likely to declare they are digital savvy (see also Sonck et al., 2011).

The introduction of smartphones and tablets and the potential for WiFi and mobile internet use is still relatively new in many schools. Practices developed from the use of the internet via personal computers prevail and one of these is plagiarism. The issues of plagiarism arising from using mobile devices was mentioned only once in Portugal but many times in Romania and Italy (and never in the other countries). This copy and paste practice is a new challenge in an era when information is just "a click away". The problem is framed in general as an obstacle to children's education because they do not cite or acknowledge the origin of the information they have obtained online. While this is a general matter of

internet use, rather than specifically attributable to smartphone and tablet use it does reflect the changing practices of the digitally connected children. In addition, teaching students to critique the information they find on the internet occurs differently between the countries in this study. Thus, as Dinis, a Portuguese teacher said the access to information via mobile devices is democratised, but it still remains to be learned how one should use the information:

Dinis: If I pay [for] the internet access I can have information that previously only few people had access to. Now we need to know what to do with this information. We have to select, organize and create from that information. And there is still a long way to go; we have to learn how to do this.
(Teacher, Portugal).

Some teachers challenge this idea that having a mobile device with access to the internet will automatically enable children to get to information, challenging in fact the myth of the "digital native" that occurs in different variants in the respondent's contributions in almost all the countries surveyed. Georgeta, a Romanian teacher, recounts that once, when she asked students to search for information on their smartphones, with one exception, they failed to find data even though she dictated the URL link. She admits that children could be very skilled at playing on the phone, but states that they are not so good at searching for information. Once again, the necessity of education is noted:

Georgeta: If the students are guided and taught how to use the internet, they would be able to obtain great results
(Teacher, Romania)

6.4.2 Problem of inequality

The most legitimate mobile device for use in school for educational purposes seems to be the tablet, not least for its bigger screen, as a Romanian father, among others, noted. The actual use of tablets in school is in a probationary phase in many countries (e.g. Germany, Belgium, Italy, the UK) in public system/state schools, and it is more common in private schools. In schools where tablets are part of the learning process the school gives a tablet (iPads were often mentioned) to students who are asked to

bring it to school daily. In Belgium, some parents mentioned that the trial process had begun without initially providing a tablet to each child, so, the students had to bring their own devices from home, which led to situations of inequality because not every child has a tablet (Belgian mother). The issue of inequality in access to mobile devices also came up in group discussions in Portugal, where parents point out that not every child has a smartphone or tablet, so "*the important message is let's use the internet' and not a specific device*" (father, 11 to 13- year-olds, Portugal).

Other parents oppose the use of mobile technology in and for school, arguing that they feel it is interferes with their parental mediation strategy. Francisco, a Portuguese father, mentions that these devices are outside of parental control, while an Italian mother is against using a WhatsApp class group for sending pictures with homework because the parental control image filter is not applicable. If a school is not selected for testing how technology functions in school, the children are allowed to bring in their tablets just for specific tasks such as preparing a presentation.

Emily, a British mother of an 11 to 13 year old child, talked about the availability of iPads in the classroom: "*In my daughter's school they actually have some iPads so that they can use them for maths, they are for using, not smartphone.*". In fact, the economic inequality of some countries – besides that which occurs within families (implicitly children) – is pointed out by Cornelia, a Romanian teacher:

Cornelia: I know that in other countries there are in each classroom these devices and a video projector; but in our case, from financial reasons, they are not available, so a teacher should carry each time, from a room to another, his or her laptop, and boxes and cables…
(Teacher, Romania)

The myth of other countries where digitalisation is complete also occurs in the account of Marta, an Italian mother (of 14 to 16-year-olds) who said she heard that in Swiss schools students don't use books anymore but have e-books on their tablets.

6.4.3 Other devices

When tablets are not available (or are broken), and there are not enough computers in the classroom, teachers allow students to use their smartphones. Once again, as Georgeta, a Romanian teacher observed, this raises the problem of inequality if all children do not have a 3/4G connection and WiFi connection is not available in all schools.

Competition between which devices are used, or which are suitable, for school, is not only between smartphones and tablets, but also between computers/ laptops and tablets. The computer is more appropriate for some tasks, said Paulo, a 12 year old Portuguese boy, because it is faster and it is easier to write using it. Even though he could access the Moodle platform on which they work at school from his smartphone, he prefers the computer. The same is stated by other children who use the smartphone for a small, specific search, but who prefer the computer for more complex tasks such as a school project. Moreover, Emil, a Danish adolescent (age 14-16), said that he has to bring his laptop daily to school, while Irene a Portuguese mother said that her younger son (12) has to bring his computer to school twice a week.

A common idea that was expressed by both parents and teachers (in Italy, Romania and Portugal) is that **digital technology (mobile or not) should not replace either the old media,** (especially books) or the teacher. They all agree that the traditional form of education should always complement the new technology.

Another interesting question raised in the interviews is whether it is preferable to have a single big screen where the teacher projects the information and thus everybody focuses on the teacher's explanations or if it would be better for every student to have their own screen (be it tablet or computer) on which they will search for information.

Diana: I don't think so because on the internet (if everyone would search by his/herself-RN) we have to read and if we don't understand the teacher explains always well!
Silvia: But while the teacher is explaining you are seeing (other disturbing images-RN).
Diana: But you have to look at the teacher and not at the computer. There is more interaction if the giant screen will be

in front of all, and not each one looking at each screen.
(girls, 14-16, Portugal).

This debate is interesting not only for the issue of the individual versus the common screen for students, but because it challenges two paradigms of education: the "traditional" one, in which the teacher is the master of information from whom the students receive as much information as possible; and a "modern" digital one, in which the information is available on the internet from which the students seek and acquire their knowledge. These two paradigms are discussed variously by children and teachers interviewed for this study and it appears that there is no clear policy, regulatory or preferred approach that dominates within the countries studied by Net Children Go Mobile. There are clearly socio-economic factors that affect the ability to adopt new technologies among children's families as well as a national and governmental level (discussed earlier). It is also evident from some examples given above that the availability of tablets for school work does not necessarily make it a "modern" school in which the teacher becomes substituted or complemented by online education services. However, the increasing use of school websites and emails to communicate with students and their families highlight the growing use of the internet for every day communication rather than educational content.

Emanuele: The school's website, the class websites, where they upload assignments, announcements, we have our own webisite…
Matteo: … useful links
Valerio: Just the classes this teacher has, however, because he created the platform
(boys, 12-13, Italy).

Thus, in all of the surveyed countries, the internet, and increasingly the mobile internet is used for communication by and within the school: students to students, teachers to students, school to parents – everyone sends the messages online, using any or all of email, Facebook, WhatsApp, Instagram, school platforms and other online services.

6.4.4 Using mobile devices offline during class

Besides being mobile, smartphones and tablets are

also "convergent media" (Ito et al., 2010). This makes them suitable to be used in class even without internet connection, something that actually happens in many ways. **The most common such use is the smartphone as a calculator,** which some teachers allow. In Denmark this is allowed without any restrictions, while in Italy, a teacher requires students to remove their SIM card in order to use smartphones during the class; others teachers explicitly forbid its use, as John, a British nine-year-old boy, said.

Using the smartphone camera is another frequently mentioned activity. **Thus, some students use it for school projects taking pictures, recording videos, and editing afterwards on a computer.** A Spanish boy (11-13) gives a good example of integrating convergent media in school, recounting how he and his colleagues used the smartphone camera for recording, sent the video by WhatsApp and then edited it for the project. Once again, the problem of teacher's control is there, as another Spanish boy (9-10) complained –when he brought his camera into school intending to use it for a school project, a teacher confiscated it.

Smartphone cameras are not only used for creating school projects, but also for **taking pictures of other physical / material school project in order to be shown at home or to friends, or even to be a testimony for a good piece of art they have created.** Thus, the smartphone camera plays an important role in increasing the self-esteem of the students, as a Romanian teacher explains:

Ileana: They are proud about what they manage to do and then ask: "Ma'am, could you please, let me take a picture to show to my mum what I was able to do?" They want to show, to prove… Or, they say "You will take it for the exposition and I would want to have a memory of it, please let me take a picture". And sometime, because we're not so closed-minded, we are the one who suggest them to take pictures (Teacher, Romania).

Besides increasing self-esteem, taking pictures of their results could have an authentication function. Again in Romania, where the system of communication between schools and parents is not so good (there are few schools that have a platform where parents can see their children's grades), Georgeta, a maths teacher mentions how children ask her to allow them to take pictures of some good

grades they have received, because *"otherwise my mum wouldn't trust me"*. Taking a picture of short informative notes that are written on the blackboard are also mentioned *("because they are lazy")*.

One last offline use of mobile convergent media in the classroom that we want to point out comes not from students, but from teachers. Along with abstract information and visual media, mobile technology can bring sounds into the classroom. Thus, in Italy and Romania, some art teachers use their smartphones or tablets to create an atmosphere by playing music to students during the classes.

6.5 Conclusions

This chapter has shown how the experience of the class is changing for both children and teachers as a consequence of smartphones and tablets. While younger children are usually forbidden to bring their smartphones to school and comply with the rules, teenagers are used to carrying, and even using, smartphones in class. This poses new challenges for teachers, who are confronted with the need to manage online interactions that interfere with the co-present interactions, and with the risk of inappropriate uses of technologies by children (e.g. using smartphones to bully or make fun of teachers).

While the use of smartphones is usually forbidden in class and sometimes in school, secondary schools teachers may make some concessions. However, teachers of the same student may set different rules and hold diverging approaches regarding the role of smartphones' in class. Students do not always comply with the rules: most often, they break the rules because they forget to turn off their ringtones, they send texts, visit or check SNSs secretly or play video games (both in class and in the toilets). Confiscating the phone is the most common sanction for those who are caught breaking the rules. However, this is a habitual yet problematic strategy for teachers, as the line between what they should or should not do is easily crossed.

Most of the problematic situations teachers have to cope with deal with privacy risks or the production and exchange of negative user generated content.

While posing new challenges for teachers, smartphones also provide them with more opportunities to engage in safety education: for example, the circulation of negative user-generated content is dealt with by a safety or preventive talk by the teacher. However, children sometimes feel their teachers do not manage risky conduct appropriately, and welcome a greater involvement on their part.

This chapter also pointed to the gap between the educational opportunities of smartphones and their actual use in school. However, some of the children, teachers' and parents' comments seem to offer more reasons for using mobile technology in school than avoiding it. The pro arguments are also more diverse, going from health or ecological issues (the opportunity to replace heavy books and dictionaries) to psychological reasons (smartphones and tablets are more engaging for children). The cons are discussed mainly in Italy and Romania, where both parents and teachers lament the "copy and paste" habit of children who have grown up with Wikipedia.

In conclusion, the challenges faced by teachers in managing and mediating their students' use of digital devices are threefold: their own poor digital skills; the problem of plagiarism; and the need to allow for equality of access for their students.

7. Conclusions

Adoption and use

- Many children gain some access to and experience of smartphones and tablets before they own them, **meaning that more encounter these devices at an earlier age than is suggested by ownership statistics**. However, as regards the implications for risks, **such access is often limited, especially when using the devices for games**.

- While there is **peer pressure** amongst children to have smartphones, partly as the **latest fashionable item**, sometimes they are **unexpected and unrequested gifts**, and young people can be critical about whether they actually need them as opposed to a traditional mobile phone.

- Many parents discuss the **age at which children should have smartphones, when they are "mature"** enough, especially for such an expensive gift. They are **sometimes bought as a rite of passage**, marking a new stage in the children's life, and if this is linked to religious moments such as Confirmation, for these households **the age of acquiring a smartphone is unlikely to fall**. But when the smartphone is **a reward for some achievement or behaviour**, or simply **a hand-me-down** as parents increasingly own smartphones, it is clear that **for these households the age of acquisition could fall in the future**.

- Certain devices, and this applies more to **tablets**, are **in some households never personally owned**. **They remain shared**, collectively bought "for the family" or at least "for the children", like some family laptops. However, **personal ownership is important because children may have potentially less restricted access and scope for use** by virtue of no longer having to share a device.

- When children own devices they **sometimes let other family members use them**; this and does

not preclude children **continuing to access other people's devices, including more powerful or in other ways more advanced ones**.

- Many parents and children are **sensitive to the costs of acquiring and using mobile devices**, especially smartphones. As with traditional mobile phones, this **can influence the choice of device and limits imposed by parents on its use and where it can be used.** It can **influence what children download** (and indeed their evaluation of apps), the degree to which young people ration their use, **the place where they use devices** (with free Wi-Fi in the home or certain public spaces) and **their choices about what to access online**. In contrast to claims about being able to use the device "anytime, anywhere" and being always "at hand", **financial considerations pose one constraint** on children's use.

- There are also **time constraints** on when smartphones and tablets can be used. Despite inter- and intra- country variation, there are many times in school that devices cannot be used. **Parents also worry about the consequences of too much screen tim**e and **often impose limits on usage** (and while some young people may try to get around these, **many children also appreciate those parental concerns**).

- Independently of parental pressures, s**ome children impose limits on their own use** prioritising other activities, including school homework. Sometimes children see how smartphones **can be a distraction**, "wasting their time" and are **wary of using the devices too much.**

- There are also **spatial constraints** on children's usage. School has been mentioned in the discussion of time constraints, but there are also **some public spaces** where, children of all ages are wary of using phones **for fear that they might be stolen**. As with traditional mobile phones, there are **certain spaces (and occasions) where use might not be socially appropriate**, or where they **cannot find a (good enough) Wi-Fi connection** and there are **social**

pressures sometimes not to use smartphones when socialising with peers.

- Smartphones and tablets have to **find a role amongst the ecology of other devices** that children possess, and where there are often **pros and cons as regards which device to use** in any particular circumstance – for example, many children prefer to do homework on a PC because of the screen size and keyboard. In other words – **new devices do not simply displace older ones –** the picture is more complex for a variety of reasons covered in the chapter.

- **Use of mobile devices, and choices about which devices to use within this ecology, also evolves over time**. This is **due to a combination of factors** such as new technology options, negative experiences of some devices and apps, fashion amongst peers, changing personal interests as children grow older and also reflect more about their use, different regulations in schools and by parents for older children compared to younger ones and changing circumstances (e.g., where the household lives), etc. But this also means the **sometimes children give up or reduce their use of some technological options, as well as increasing their use of others**.

Changes and consequences

- While beneficial outcomes are perceived as highly significant and prevalent, more problematic consequences of the widespread adoption of smartphones were also identified and discussed by young people.
- The everyday practices of children are being reconfigured by new mobile devices. For example, as **children become more social media-savvy they become very aware of the dangers of using the mobile internet and public messaging services present.**
- **For some children the "always on" availability of 24/7 information feeds becomes a perpetual circle of tedious non-activity** as they scroll through SNSs finding

nothing for them or nothing new but looking again and again just in case they have missed something.
- Conversations (verbal or textual) between children during the day continue when they are separated at the end of the day en route home and then during the evening and into the night. **While this is not a new practice it appears the multiple means of simultaneous communication has intensified this contact.**

- The emergence of new devices and tools is accompanied by a remediation of those already used. However, **the communicative practices of children and teenagers also show many continuities with desktop-based social networking or pre-smartphones mobile communication and are likely to survive.**

- Children are enthusiastic about the unprecedented ease of communication and the variety of communication modes and channels available; many interviewees **believe they are more "sociable" since having a smartphone,** especially because for some smartphones in particular are always "at hand" and some apps such as WhatsApp enable free-of-charge and group communication.

- The smartphone has **inherited and improved this microcoordination function** of mobile communication by making many-to-many communication available. WhatsApp and Facebook (partly accessed through smartphones), then, are the preferred means of coordination with peers.

- While the content exchanged may be irrelevant or secondary, many communication devices serve as **confirmation of friendship ties**. According to many interviewees, smartphones and associated apps have improved communication aimed at reinforcing group belonging and **strengthening relationships.**

- If the camera phone democratised photography by turning it into an ordinary practice, smartphones have turned both **the sharing** of photos with larger audiences **and the editing of pictures** into **a mainstream practice**.

- Among the positive consequences, some children identify the **transformation of homework into a collaborative activity** conducted through WhatsApp or Facebook, where children upload pictures of assignments or translations.

- The use of **WhatsApp** for communication with classmates is more popular in some countries than others, **sometimes replacing Facebook groups both for doing homework and for daily chitchat**.

- Although some children report being "annoyed" by their constant availability to peers, many **conform to the social pressure to be "always on"**. Social access to peers, it is believed, has become of even greater importance with the adoption of smartphones.

- However, that feeling of **entrapment** generated by normative mobile maintenance expectations and etiquette whereby **one should be always accessible and reply in real time** appears to be enhanced by the new features of instant messaging apps and SNSs alike. **Knowing that the sender is notified** when the message has been received and read causes **anxiety** as well as **misunderstandings** in relationships with friends.

- The **uninterrupted communication** flow is particularly criticised by adults, especially parents, who lament the fact that children are **continuously distracted by irrelevant messages** while they are doing their homework. For their part, children do **sometimes adopt defensive strategies** such as leaving the phone in another room or leaving WhatsApp groups. Indeed some children note that the **noise** literally and figuratively of WhatsApp conversations is one of the main reasons to reduce one's participation in peer groups of any sort.

- Children also raise the issue of how increased communication opportunities, and especially the possibility of sending free messages, have led in some cases to more **aggressive communication**.

- Smartphones are also **a source of disturbance of co-present interaction**. Many children in all the countries were critical of the fact that some peers spend time that should be for face-to-face interaction writing textual messages to distant others. This critical evaluation is captured in such phrases as "*If you wanted to do that you could have stayed at home*'"

- Beyond disturbing face-to-face interactions, smartphones are associated with a **decrease in the time spent together face-to-face.** Younger children, for example, sometimes lament the decline in interaction in school time, especially in school breaks that were once dedicated to collective activities.

- As regards **family communications, smartphones have expanded the previous role of mobile phone**s as children also use apps WhatsApp, to let parents know where they are or to seek permission to come home later. Moreover some family groups have created WhatsApp groups to **coordinate the management of children**, for example to inform other parents if they are not free to pick up their child from schools.

- The **geolocation tools on smartphones can increase the scope for parents to know their children's whereabouts** – sometimes children see that this can be useful, as when they need their parents to pick them up. At other times it can be perceived more negatively, enhancing the role of the smartphone as an "electronic leash".

- Parents sometimes perceive **the smartphone as leading to greater overuse of the device** (even compared to traditional mobile phones) and certainly **as reducing the time children spend interacting with family members**. As a result they sometimes try to limit use or specify times when smartphones (and tablets) cannot be use, e.g. when eating (as noted earlier above in the discussion of the time constraints experienced by children).

- As in the case of PCs and laptops, **when siblings share devices (more likely tablets) this can be a source of sibling conflict** over who spends time using the devices. Moreover, both tablets and smartphone activities have a system of **applications that are tied to a particular user**. This can lead children to complain that their programs or apps have been removed to make way for those of siblings of parents. Where they go when surfing, what they download, or use can also be visible to other users of the same device – hence the desire by many children to have their own, personal device.

Risks

- **Smartphones offer new opportunities for bullying and harassment**. For example, smartphone apps such as WhatsApp may offer new modes of peer interaction, but they can also lead to **new modes of inclusion and exclusion. WhatsApp groups can be a space for posting negative comments or images**. **Aggressive acts can now more easily be initiated from locations not confined to PCs**, including posting comments when at school.

- Smartphone apps, principally **WhatsApp as the communications channel currently in fashion, similarly provide a new space for meeting strangers**, for example, in WhatsApp groups. There was one case of apps being made to look like WhatsApp but that led to requests from strangers,

- **The scope for the misuse of data, identity theft and general threats to privacy is enhanced by devices such as smartphones**. The portability of mobile devices has made it easier for young people to **take each other's smartphones and to send negative messages directly from the accounts of the owner or to answer messages on behalf of the owner**. As it is easier to share, this means other children can **access private areas on the smartphones** (pictures, messages) – and while this was also true of traditional mobile phones, children can

now keep more things on their smartphones. This also **enhances anxieties about losing smartphones,** not just because of its expenses but because what is on it (e.g. pictures) could be misused.

- Children themselves express **different views as to whether portable, and perhaps more importantly private devices, increase access to online sexual content**. Some girls in different countries mention the fact that **boys bring and share sexual material in school on their smartphones**. Smartphones obviously **provide another device for children to send sexual material to each other**. It is not clear whether the technical possibility actually leads to more sexting (requests).

- Children sometimes felt that the **amount of other unwanted content had increased** because of smartphones, for example, chain messages on WhatsApp, and commercial ads popping up. Some cited "annoying" developments, such as being redirected to an app store in the middle of playing a game on a smartphone.

- Children often referred to the **hidden cost of apps on smartphones, since money can be taken from the device if an account has been set up**. Some cited unexpected charges for SMS massages related to game or when entering phone numbers to win a prize. Others mentioned the unexpected costs of playing games while internationally roaming or going above their limits when watching YouTube on 3G.

- Some children **think they are over-dependent on smartphones or particular apps such as WhatsApp** checking it more now that it is "at hand" for much of the time. **Some do report that their sleep is disrupted by continual message notifications**.

- **The technical issues or constraints of what might lead some adults to be critical are equally regarded as problematic by the children**. For example, they talk about limited battery life and memory, the devices being easily broken (usually by dropping them), and slower

connection on some mobile devices. Content-related issues included viruses that stick to apps and the fact that some games and other apps use up a considerable amount of memory.

- Occasionally, but **rarely, children were wary that they could be tracked** (and potentially stalked or harassed) **by geolocation software** that allowed people to check their location.

Preventive actions and coping measures

- Perhaps unsurprisingly, **many strategies to prevent risks that have been followed for the internet in general were also followed when accessing the internet on portable devices**. These include **self-reliant** strategies, not involving others (such as being careful sharing pictures, only accepting friend requests from familiar people) and **other reliant** ones such as seeking support from those technically savvy with smartphones.

- There are some examples of self-reliant strategies particular to smartphones. The **wariness of becoming overdependent on smartphones motivates some young people to curb their use**, to put their devices away during certain activities, using the "Do not disturb" mode more often or becoming more selective in choosing to whom and when they reply. Meanwhile **fear of the smartphone (or tablet) being stolen leads to children avoiding taking devices outside**, in particular not to outdoor activities or public places where there are many people.

- **Technical strategies more specific to mobile devices** include **turning off the geolocation functions**, using **passwords** to protect the smartphone and using whole **range of "technical" means to stop parents checking their devices**.

Parental mediation

- It is not just pressure from children that motivates parents to buy expensive devices for children; there is also **competition between parents to be seen to be doing the best for their child**.

- One theme noted in relation to the traditional mobile phone was **the need some parents felt to keep in touch with and to monitor their child**. In this study we also find messages sent to smartphones in school time (even when these are not allowed), but one particular smartphone variant is **using the geolocation functions to keep tabs on where children are located.**

- **Giving children these mobile devices to occupy them and to act as electronic babysitters provokes mixed feelings in parents** – some do it to ease the pressure on them, while others are critical of this practice, saying it is not good parenting.

- **Some parents acknowledge that it is more difficult to monitor what children do online on their mobile devices**, compared, for example to a PC – even when they sometimes check tho mobile devices. They no longer monitor by casual observation, and some feel that the mobile devices are more complex, beyond their skills, even compared to the traditional home computer.

- This also has implications for rule setting – **it can be more difficult with mobile devices** (compared **to PCs and laptops) to determine if parental rules about their usage are being followed**

- **The problem of being able to advise their children is intensified by mobile devices, which are considered more complicated and harder to handle by parents.** Parents note the complexity of smartphones compared to old computers or even tablets.

Teachers and schools

- **Rules about having and using smartphones vary by country, by school, and also by the age** of the child (with more tolerance for older children about using smartphones in break times). **Rules also vary in what is allowed**: sometimes use in school is forbidden (but because children are given phones to contact parents they can bring them, but can only use them outside school, or in designated spaces). Sometimes the children have to hand-in smartphones, while in other cases this is not felt to be practical. Sometimes they are allowed use them in break times, or **for particular purposes** (listening to music) **but not others** (taking pictures). And whatever the rules, individual teachers might **sometimes grant concessions**.

- That said, as with mobile phones before, **some children break school rules** and use smartphones at times when they should not. Because of this, **some young people particularly appreciate smartphones** (or particular brands of them, such as BlackBerries) because are **small and easy to use without being noticed by teacher.** Some teachers often agree that it can be difficult to detect smartphone use.

- However, **even the children sometimes note the disruptiveness of breaking school rules**, particularly in lesson times, due to the **distraction** of checking the smartphone (someone else checking or feeling obliged to check themselves) or even a peer watching a video on the device.

- Even when not officially sanctioned, **some students use their smartphones to check other relevant sources relating to material being covered in lessons** – both to verify and support what the teacher is saying, or to challenge it. **Some have also used to the devices to record teachers giving views that are not sanctioned by the schools.** In certain senses, this could all be viewed as **empowering**

children, but it also has implications for teacher-student (power) relations.

- **Smartphones can also be used more negatively against teachers** in terms of posting comments about or taking and posting pictures of teachers, amounting to a form of harassment.

- As **regards punishments for breaking rules in using smartphones**, the most common punishment is the **confiscation** of the phone, for various lengths of time (often longer if it is a repeat offence), and sometimes this involves requiring **parents to come to the school** to collect the phone (in more serious cases). However, **confiscating phones raises new issues for teachers**: where should they put these expensive devices? Can students (and parents) blame the teachers if the smartphones are subsequently broken or lost?

- Children **actually have quite complex and nuanced views about school** rules. Because of the distractions noted above, **most feel their use should be regulated,** and sometimes they want rules as guidelines for them given the temptation to use them. But they differentiate between, for example, not using them when needing to be attentive, but being allowed to use them while doing less demanding activities or being allowed to use them to check school work, but not to cheat in exams, for instance.

- **Some teachers and parents see the positive potential for allowing mobile device use in school,** especially tablets. It facilitates the more general trend towards the educational system becoming more digitally orientated, with access to interactive material, challenging children to look up material in real time and reducing the need for (heavy) paper books and resources. **One barrier to allowing access**, especially to smartphones but to some extent to tablets, is they are still **not seen as educational tools**, but are more associated with entertainment and in the case of smartphones with communication.

8. Cross-cultural factors

- In general quantitative data provides a firmer basis for spotting cross-cultural variation than qualitative material. But one problem is that although the statistics from the Net Children Go Mobile survey (Mascheroni & Ólafsson, 2014) show variations between countries, it is not always clear why this variation exists.

- By comparison, one weakness of qualitative data as regards reporting on cross cultural variation is that some of the differences may reflect the ways that interviews were conducted in the different countries. This is because despite sharing the same topic guide, the interviewers in the various national teams were allowed more flexibility than in asking survey questions, for example, responding to what interviewees said and following up on themes raised in discussion.

- Moreover, qualitative studies deal with relatively small samples, and hence if some countries report more of certain discussions than others, this may be by chance, due to the particular interviewees who participated.

- That said, when there were striking differences in what children talk about in different countries, have been given in footnotes because these may be areas to be explored in further research, including quantitative studies. Examples would be **interviewers noting that some risk experiences were discussed more in some countries (e.g., bullying in Chapter 4) or some coping behaviour (e.g., collective strategies in Chapter 4)** or observations that there were **more discussions of teachers lacking digital skills in Southern as opposed to Northern Europe** in Chapter 6.

- At times, we may be seeing **that some practices are more prevalent in some countries than others,** for example in Chapter 3's discussion of Italian children expanding their social networks by activating latent ties, such as "friends of

friends", seemingly supported in some of the quantitative data. **Meanwhile some concerns might be more country specific,** as in Chapter 6's discussion of fears about smartphones facilitating plagiarism in Italy and Romania.

- Perhaps unsurprisingly **which devices, platforms and services were discussed by children in the various countries did sometimes reflect the broader patterns of services that were available and popular** where quantitative data collected by Net Children Go Mobile and through other statistics show that distribution of social networking platforms was uneven. Reflecting this in Chapter 3, for example, Snapchat or Twitter were referred to in some countries more than others. But at times **quantitative data showing cross-cultural variation can be made more understandable and elaborated through the qualitative data** reported here. For example, the Net Children Go Mobile's statistics reported in Chapter 6 show how regulation of smartphones in school varies by country. But it then goes on, through **comments by teachers and students, to clarify why they are regulated and what students in particular think about it**.

- In Chapter 5 **vignettes were used to illustrate the variations in parental mediation** shown in the Net Children Go Mobile research. **Here we see in more detail how individual households in different counties may reflect the patterns, how they are experienced at the micro-level**.

- Sometimes the basis for some country variation is already clear, such as the UK's **early and substantial internet safety training in schools. In Chapter 2 we see how this concern for safety** is extended into smartphones in terms of teachers' advice to children to be careful about revealing their devices in certain public spaces. And UK children are clearly conscious of this issue (also noted in discussions of preventative strategies in Chapter 4). **In other words, such country differences or specificities make sense given the broader picture that has already been built up in previous research.**

- Last, the qualitative data show how **some events**

which are more common in some, Catholic, countries such as Holy Communion and Confirmation, can have a bearing on the timing of the adoption of smartphones and tablets – reflecting both the moment of maturity for the child and an occasion where these devices can be gift.

9. Policy recommendations

9.1. Adoption and use

- **Cost issues**. As noted in this chapter and Chapter 4 about risk, young people often reported unexpected costs incurred by them unknowingly installing chargeable apps or using certain services, such as roaming. This can be particularly distressing for children (who have acted in good faith) not just because of the money involved but because it can lead to stressful interactions within the family if they appear to have made a mistake. Digital literacy around the use of mobile devices and apps should be a priority, with industry taking a lead role in ensuring clear specifications of costs of apps and services, possibly in a form that specifically addresses young people as a growing segment using the mobile internet.

- **WiFi**. It may not be appropriate to recommend to commercial institutions that they should supply free WiFi access but the financial constraints on the increasing children number of children with smartphones and tablets means that this audience would particularly appreciate the existence of such free WiFi spaces. Especially in countries where the commercial centre supplies few such spaces, government and other civic bodies should be encouraged to compensate by enabling such free internet access.

9.2 Changes and consequences

- **Message notifications.** Children expressed concerns about the new technological affordances of messaging apps and social media, reporting that they feel socially obliged to reply in real time but how fast (sometimes ill-thought-out) replies can lead to conflicts or misunderstandings with peers. Notifications should be disabled by default for younger children or made optional for them to use.

- **Safe, private spaces**. Children also expressed the need for safe, private spaces and services for example when they praise Snapchat because of the freedom from the social pressure of always having to produce "good-looking pictures". Service providers should consider how they might empower children by providing safe and private spaces and/or tools for customising apps and platforms.

- **Availability to peers via mobile devices**. Children sometimes shared parental concerns about the potential negative consequences of always being socially accessible to peers. Parents can help to empower children by educating them to more responsible uses of these devices, helping them to understand that mediated communication does not need to be in real time, that written words are less ephemeral than spoken words and that text can reach a wider audience than children had expected. Setting rules is also an effective measure, without downplaying the rules children set themselves when not under parental pressure, for example, not using smartphones until they have completed their homework. Parents should also recognise as they sometimes do that they are also victims of the communicative bubble when they want their own children to be always available to them.

- **Contextually mobile communication.** As school is the place where children spend most of their day together, teachers are in a privileged position to promote the responsible use of mobile communication. Encouraging face-to-face interactions among children by means of engagement in shared offline activities without minimising the relevance of mobile communication for children is also recommended. Children need to realise that they can still manage face-to-face interactions and that mobile, online communication can be as problematic as co-present interaction.

- **The role of children in fostering responsible behaviour.** Mobile (online) communication has the potential to exacerbate issues and problematic aspects of peer communication: issues of belonging, trust and respect are all at play. Children need to be tresponsible for the safety of their (online) communication

environment. Those children who are more aware of these issues should be encouraged to promote better mobile and online communication amongst their peers.

9.3 Risks

- **Aggression and cyberbullying.** The new forms of sociality enabled by mobile devices (e.g. WhatsApp) and their catering to the needs of group communication can further foster patterns of aggressive communication and peer victimisation (such as excluding some from WhatsApp groups-within-groups). The ease of taking compromising pictures of peers and posting them on SNSs is another way in which mobile devices can foster cyber-aggression and victimization. Cyber-bullying prevention campaigns should also include the need for responsible use of mobile devices, as well as for the most recent and popular mobile apps.

- **Sexting.** "Revenge sexting" (usually boys posting sexual photos of their ex-girlfriends to a larger group of peers, coupled with victim blaming (marked by *"she shouldn't have sent those pictures"* -type attitudes) was one of the practices reported as being the most harmful. While mobile devices are usually the common dissemination tools (i.e. photos taken and sent from mobile to mobile in the first instance, and further shown or disseminated to a larger peer audience), this type of victimisation is something to be addressed by both digital rights (e.g., the right to personal image) and anti-gender discrimination and anti-sexism campaigns (e.g. it is not only the girls' responsibility to ensure her personal image is not ruined online, but also the responsibility of young boys to treat them with respect).

- **Mobile phone numbers**. Children talked about receiving unpleasant phone calls and texts from "strangers" (most likely friends of friends) without having given out their phone number. Phone numbers sharing without permission is a reported way in which young girls experience unsolicited sexual communication. As mobile devices have become more at the centre of children's

sociability increased attention should be given to being careful about who has one's phone number and the potential consequences of distributing peers' phone numbers should be emphasised in safety curricula and campaigns.

- **Smartphone skills**. Children talked about unpleasant situations involving having their phone agenda and SNS contact lists mixed when they tried to merge Facebook and WhatsApp contacts. Acquiring skills around the safe management of mobile and online contacts should be a priority.

- **Privacy and the smartphone**. Another way in which children might experience privacy issues is when others get unwarranted access to private content on their smartphone (such as unauthorised access to a photo gallery or messages). These issues can be addressed by making children aware of responsible sharing of their own devices.

- **Provide assistance in developing digital skills**. Operational skills are required to change settings, such as selecting modes or turning off features. When acquiring a personal mobile device, children should master a number of basic digital skills to operate the device in a safe and responsible way. Because of social inequalities in children's home contexts, school remains the preferred environment to learn (operational) digital skills.

- **Encourage collective and collaborative coping strategies.** Support and assistance from parents, teachers, family members and peers can be very helpful. Online resilience is fostered in a supportive social environment where children learn step by step how to deal with risks on mobile and non-mobile devices. Parents and other caretakers should find a good balance between active mediation, monitoring online activities and imposing restrictions, depending on the child's age and personality.

- **Teach children how to deal with social pressure and overdependence.** Children should know it is perfectly fine to be "offline" sometimes, and accept it is okay not to reply

immediately to every message or notification. Self-monitoring techniques can be very helpful, but some children have difficulties in managing their own online and mobile activities. Tips and tricks for self-management and how to support each other in these practices would be valuable.

- **Awareness-raising initiatives for online risks remain valid for mobile risks.** Children deal with mobile risks in a very similar way to how they deal with "general" online risks. Projects and initiatives developed for online risks remain useful, but should explicitly mention the validity for both mobile and non-mobile contexts. The materials used in awareness-raising should include examples and illustrations from unpleasant situations happening on both mobile and non-mobile devices and platforms.

9.4 Parental mediation

- Parental motivations for providing (or not) mobile devices to children revealed common ideas such as teens lacking maturity, the "umbilical cord" and the correspondent lack of autonomy, as well as the challenge of balancing trust, surveillance and privacy, or the complex negotiation of rules within the families. These issues may be an interesting topic for the news media, namely for news magazines, thus promoting an overview of contemporary families' media practices and the role of key points such as trust, parental support, shared and private spaces and times within the families.

9.5 Schools and teachers

- **School rules and educational uses of mobile devices**. School regulations related to mobile devices and mobile internet use could hinder teachers' or children's desire to use this technology for educational purposes in class. A reflection on whether school regulations might also be designed to take into account the possible educational benefits of mobile

technology for in-class activities is welcome.

- **Copy and paste behaviour and mobile devices**. Some teachers have expressed concerns that the use of mobile devices and the mobile internet in class could enhance the copy andpaste and plagiarism habits. While some specific regulations and penalties for this kind of behaviour could be envisioned, allowing the use of mobile devices in class could represent a good opportunity for teachers to discourage in situ the copy andpaste approach to information use.

- **Teacher training**. European and national programmes to help teachers manage digital technologies for school-related activities have had some results. Those designing such programmes need to consider the capabilities of new technologies and applications even though some of them do not look, at first glance, to be designed for educational purposes. Alongside the traditional and legitimate educational platforms, teachers also have to be trained regarding the potential of social media capabilities for education and how various apps might not only allow students to consult online information but also to create online content.

References

Barbovschi, M., & Vandoninck, S. (2014). Dealing with problematic situations online: preventive measures and coping. In , D. Smahel & M. F. Wright (Eds.) *The meaning of online problematic situations for children* (74-124). London: EU Kids Online, London School of Economics and Political Science.

Beckman, K., Bennett S. & Lockyer L. (2014). Understanding Students' Use and Value of Technology for Learning. *Learning, Media and Technology, 39*(3): 346–367.

Bertel, T. (2013). 'It's Like I Trust It So Much I Don't Really Check Where It Is I'm Going Before I Leave' - Informational Uses of Smartphones Among Danish Youth. *Mobile Media & Communication 1*(3), 299–313.

Bertel, T. & Stald, G. (2013). From SMS to SNS: the use of the internet on the mobile phone among young Danes. In K. Cumiskey & L. Hjorth (Eds.) *Mobile media practices, presence and politics. The challenge of being seamlessly mobile* (pp. 198-213). New York: Routledge.

Bolter, J. & Grushin, R. (1999). Remediation: Understanding new media. Cambridge, Mass.: MIT Press.

boyd, d. (2014). *It's Complicated: the social lives of networked teens*. New Haven: Yale University Press.

Buckingham, D. (2012). *The material child*. Cambridge, Polity Press.

Caron, A., & Caronia, L. (2007). *Moving cultures*. Montreal: McGill-Queen's University Press.

Clark, L. S. (2013). *The Parent App. Understanding Families in the Digital Age*. Oxford, Oxford University Press.

Dürager, A. & Livingstone, S. (2012). *How can parents support children's internet safety?* London: EU Kids Online.

European Schoolnet (2013). *Survey of Schools: ICT in Education*. European Schoolnet, Brussels.

Goffman, E. (1959). *The Presentation of Self in Everyday Life*, Garden City: Doubleday.

Green, N. & Haddon, L. (2009) *Mobile Communications. An Introduction to New Media*, Oxford: Berg.

Haddon, L. (2004). *Information and Communication Technologies in Everyday Life*. Oxford: Berg.

Haddon, L. (1998). 'Il Controllo della Comunicazione. Imposizione di Limiti all'uso del Telefono'. In L. Fortunati (Ed.) *Telecomunicando in Europa* (pp. 195-247). Milano: Franco Angeli.

Haddon L. & Ólafsson, K. (2014). 'Children and the mobile internet'. In G. Goggin and L. Hjorth (eds) *The Routledge Companion to Mobile Media* (pp, 300-311). Abingdon: Routledge.

Haddon, L., & Vincent, J. (2009). Children's Broadening Use of Mobile Phones. In G. Goggin and L. Hjorth (Eds.) *Mobile Technologies From Telecommunications to Media* (pp. 37-49). New York: Routledge.

Hall, J.A., & Baym, N.K. (2012). Calling and texting (too much): Mobile maintenance expectations, (over) dependence, entrapment, and friendship satisfaction. *New Media & Society, 14*(2), 316-331.

Ito, M., *et al*. (2010). *Hanging Out, Messing Around, Geeking Out: Kids Living and Learning with New Media*. Cambridge, MA: The MIT Press.

Katz, J.E., & Aakhus, M. (2002). *Perpetual contact: Mobile communication, private talk, public performance*. Cambridge: Cambridge University Press.

Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality, 1*, 141–169.

Lee, D-H. (2013). Smartphones, mobile social space, and new sociality in Korea. *Mobile Media & Communication, 1*(3), 269-84.

Lelong, B. and Thomas, F. (2001). 'L'Apprentissage de l'Internaute: Socialisation et Autonomisation', paper for the conference e-Usages, Paris, 12-14 June.

Licoppe, C. (2004). 'Connected' presence: the emergence of a new repertoire for managing social relationships in a changing communication technoscape. *Environment and Planning D: Society and Space, 22*(1), 135 – 156.

Ling, R. (2004). *The Mobile Connection: The Cell Phone's Impact on Society*. San Francisico: Morgan Kaufmann.

Ling, R. (2008). *New Tech, New Ties. How Mobile Communication is Reshaping Social Cohesion*. Cambridge, MA: MIT Press.

Ling, R. (2012). *Taken for grantedness. The embedding of mobile communication into society*. Cambridge, MA: MIT Press.

Ling, R., & Haddon, L. (2008). Children, youth and the mobile phone. In K. Drotner & S. Livingstone (Eds.), *The international handbook of children, media and culture* (pp. 137-151). London: Sage.

Ling, R., & Yttri, B. (2002). Hyper-coordination via mobile phones in Norway. In J. Katz and M. Aakhus (Eds.), *Perpetual Contact: Mobile Communication, Private Talk, Public Performance* (pp. 139-169). Cambridge: Cambridge University Press.

Livingstone, S. (2007). Strategies of parental regulation in the media-rich home. *Computers in Human Behavior*, 23, 920–941

Livingstone, S. (2012). Critical Reflections on the Benefits of ICT in Education. *Oxford Review of Education, 38*(1), 9–24.

Livingstone, S., & Bober, M. (2006). Regulating the internet at home: contrasting the perspectives of children and parents. In D. Buckingham and R. Willett (Eds.)

Digital Generations: Children, Young People, and New Media. Lawrence Erlbaum Associates, Mahwah, N.J., 93-113.

Livingstone, S., Haddon, L., & Görzig, A. (Eds.) (2012). *Children, Risk and Safety Online: Research and Policy Challenges in Comparative Perspective*. Bristol: Policy Press.

Livingstone, S. and Helsper, E. (2007). Gradations in digital inclusion: children, young people and the digital divide. *New Media and Society*, 9 (4). 671-696.

Marwick, A., & boyd, d. (2014). "It's just drama": teen perspectives on conflict and aggression in a networked era. *Journal of Youth Studies*.

Mascheroni, G. (2013). Parenting the Mobile Internet in Italian Households: Parents' and Children's Discourses. *Journal of Children and Media*, DOI: 10.1080/17482798.2013.830978

Mascheroni, G., & Ólafsson, K. (2014). *Net Children go Mobile: Risks and Opportunities* (2nd edition). Milano: Educatt. Available at www.netchildrengomobile.eu/reports/

Matsuda, M. (2005). Mobile communication and selective sociality. In M. Ito, D. Okabe & M. Matsuda (Eds.). *Personal, portable, pedestrian. Mobile phones in Japanese life* (pp.123-142). Cambridge, MA: MIT Press.

Nelson, M. (2010). *Parenting out of control: Anxious parents in uncertain times*. New York: NY University Press

O'Neill, B., Staksrud, E. and McLaughlin, S. (Eds.) (2014) *Promoting a Safer Internet for Children. European Policy Debates and Challenges*. Nordicom.

Park, S. (2013). Switching between distractive and productive multitasking: A case study of how users adapt to mobile tablet devices. Paper for the ICA Mobile pre-conference '10 years on- Looking Forwards in Research', London, June.

Pasquier, D., Simões, J. A. & Kredens, E. (2012). "Agents of mediation and sources of safety awareness: a comparative overview. In S. Livingstone, L. Haddon and A. Görzig (Eds.), *Children, risk and safety on the internet: Research and policy challenges in comparative perspective* (pp. 219-230). Bristol: The Policy Press.

Prensky, M (2001) Digital Natives, Digital Immigrants: Part 1. *On the Horizon, 9*(5), 1 - 6.

Richardson, J. M. (2013). Powerful Devices: How Teens' Smartphones Disrupt Power in the Theatre, Classroom and Beyond. *Learning, Media and Technology 39*(3), 368–385.

Roth, S., & Cohen, L. J. (1986). Approach, avoidance and coping with stress. *American Psychologist, 41*, 813–819.

Smahel, D., & Wright, M. F. (Eds.). (2014). *The meaning of online problematic situations for children*. London: EU Kids Online, London School of Economics and Political Science.

Sonck, N., Livingstone, S., Kuiper, E., & De Haan, J. (2011). *Digital literacy and safety skills*. London: EU Kids Online, London School of Economics and Political Science.

Scifo, B. (2005). The Domestication of Camera-Phone and MMS Communication. Early Experiences of Young Italians. In K. Nyìri (Ed.*), The Global and the Local in Mobile Communication* (pp. 363-373). Wien: Passagen Verlag.

Verkasalo, H., López-Nicolás, C., Molina-Castillo, F., & Bouwman, H. (2010). Analysis of Users and Non-users of Smartphone Applications. *Telematics and Informatics, 27*, 242-55.

Vincent, J. (2004) *11 – 16 Mobile : Examining Mobile Phone and ICT uses amongst children aged 11 to 16* December 2004 DWRC Report funded by Vodafone UK

Vincent, J. (2013). Is the mobile phone a personalized social robot? *Intervalla 1*, pp 60-70.

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European children and their carers' understanding of use, risks and safety issues relating to convergent mobile media. (Deliverable 4.1) October 2014

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