YOUNG CHILDREN (0-8) AND DIGITAL TECHNOLOGY

What changes in one year? - National report - CROATIA

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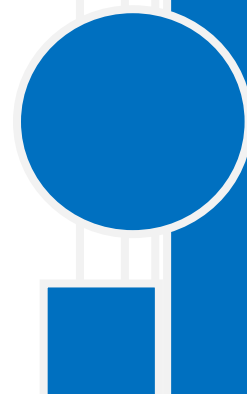
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Executive Summary

This research is a follow up study on young children (0-8) and digital technology, first done one and a half years ago (Kotrla Topić & Perković Kovačević, 2015). In the original study, ten Croatian families from Osijek and its surroundings, having at least one child aged 6 to 7, were chosen to examine young children's and their families' experiences with new technologies. At that point, we wanted to find out what devices children at that age used, what they were using them for, what they thought and how they felt about using such devices and why that was. Furthermore, we wanted to find out what their parents thought about their engagement with digital technology – what were their perceptions of risks and opportunities, how much time they allowed their children to use the devices, to what end and why that was so.

Now, one and a half years later, we wanted to find out what has changed in regard to the same families and their use and perception of digital technology.

In order to achieve this objective, we chose 5 families from the previous 10; we revisited them at their homes and asked them all the questions we were interested in, focusing on the changes that have happened in this time period. Data collected from the parents and children are based on their answering the questions from the Protocol of Observation during the interview, and a pre-interview questionnaire completed by the parents prior to the interview. The interviews took place between January and February 2017.

The result of this study provided us with an insight into changes that happen in a little over a year in young children's and their families' everyday life interactions with digital technology.

Results show that not much has changed.

Families have not purchased many new devices, and children have not obtained many new skills. Digital technology is still considered to be an integral part of lives of the five families included in the sample, but it does not dominate their daily routines. In some families children gained a little more screen time because the families' life circumstances changed as children started the first grade of primary school in September 2016. Parents are not happy about this change. The children still enjoy using digital technology and would probably gladly welcome even more screen time if they were allowed.

For some children, there has been a slight shift in device preference – from tablets to smartphones. Only two out of five children have their own smartphones, but two more children are occasionally allowed to use their parents' smartphones. They all use them to play games and watch videos on YouTube, and more rarely to communicate with friends or family. Children prefer to use the devices on their own, and for the purpose of having fun. However, the most dominant form of interaction with digital technology, in four out of five families in the sample, still involves watching television. Watching television is something younger and older siblings can do together and it is something that their parents join in on occasion.

As for new skills that children have obtained in a little over a year, they include learning how to use the camera or voice recorder on a smartphone, and being able to use the YouTube on their own since they now have better reading and writing skills and better skills of downloading games on devices. When it comes to specific skills regarding the use of applications that children have acquired during a one and a half year period, a few of them mention the use of Viber.

On the other hand, children have a better understanding of the difference between on-line and off-line activities, they know what a password is, and most of them have heard of a computer virus.

Not much has changed in the parents' perception of digital technology – they still first emphasize the same possible negative effects of digital technology: addictive behavior, aggressive behavior, consequences for the eyesight and posture and the fact that other areas of life might get neglected if children have too much screen time. As positive implications, the parents mention acquiring digital literacy skills and the help of digital technology in acquiring various other skills. At this point, now that all the children from the sample are in primary school, the parents more often mention the need for formal education regarding digital literacy skills (which is, in fact, lacking in Croatian schools).

Since the sample in this research is smaller than in the first study, all the parents in the study have restrictive mediation strategies in terms of screen time and also in terms of content.

Key findings

- During a one year period, the five **families from our study did not purchase many new devices**. To be more specific, two families have no new devices at all (HR02 and HR05), one family (HR01) just recently got a new tablet and in the remaining two families (HR06 and HR03), children that had smartphones before now got SIM cards for those phones.
- Except for the tablet in the HR01 family, which belongs to the father, **other newly obtained devices belong to children who got them and are not shared**.
- As mentioned above, **the children in this study did not gain many new skills**. The few skills that children have gained are still in the domain of basic digital literacy skills and they include learning how to use the camera or voice recorder on a smartphone, and being able to use the YouTube on their own since they now have better reading and writing skills and better skills of downloading games on devices.
- As for specific skills regarding the use of applications that children acquired during a one year period, **a few of them mention the use of Viber**
- **Screen time for all the children in the study is approximately the same as it was one and a half years ago.** This is because of limits set by their parents. In situations when some of the children are home alone, they use the technology far more than they would if their parents were present.
- Parents report **no special new rules** being established for the use of these new devices, problems are solved on the go.
- None of the parents report that there was any digital activity that presented a challenge for their children.
- **None of the children report any unusual or unpleasant events** happening while using digital devices.
- In Croatian primary schools there are no IT classes in lower grades. Some schools offer extracurricular IT classes for younger students, but this is rare. **Primary schools do not encourage children to use personal digital devices in class**.
- Without formal education, the few **digital skills children obtained during a one year period came again from watching their parents or older siblings.** When they encounter a problem, they ask their parents.
- Individual perception of digital technology has not changed much in a one year period. **Children still love it, and parents still hesitate about it.**
- When asked about what digital technology means to their family life, the parents respond that it is **something that helps them relax in their free time, and something that is part of family rituals** – watching cartoons together with the children. Some parents feel that it is a **good tool for learning new information**

- **and that it can help build stronger family connections** because distant family members can communicate more often using digital technology.
- Parents worry that using digital technology too much might alienate children from other activities – the same as one year earlier.
- Children are still **quite unaware of the possible negative sides of using digital technology,** apart from the fact that it might ruin their eye sight and that if affects their behavior.
- All of the parents in this sample show an **active and restrictive style of mediation** when it comes to digital technology, just as they did a year earlier.
- Parents say they sometimes use digital technology as a **means of punishing and rewarding the children's behavior.**
- When we look at the content of digital activities of the children in the sample, we find that **gender differences are not expressed as much as it would be expected**.

Challenges and recommendations

The main finding of this study is that it did not detect many changes in the perception of digital technology among children and their parents, nor did it detect many changes in daily practice or skill enhancement when it comes to young children's interaction with digital technology in a period of little over a year.

On one hand, there was no clear reason to expect the change in perception – perceptions and attitudes were formed over a longer period prior to the first study, and neither parents nor children reported any major positive or negative experiences since then that might have affected their attitudes. On the other hand, children are one and a half years older than at the time of the first study, they have much better reading and writing skills and they are all in primary school, but at the same time, they have not gained many new digital literacy skills. Their skills are still mostly directed at obtaining games or applications or finding activities that are fun, and they still learn mostly from copying others – parents and/or older siblings. The children are still quite uninterested in possible learning activities using digital technology, and it is clear that neither their parents nor school curriculum directs them that way.

Therefore, the main challenge for both children and parents seems to be how to enhance the children's digital literacy skills. It seems there is a knowledge gap regarding what digital skills eight year old children should have, and how they should obtain them.

Recommendation for policy-makers arising from this analysis is that more effort should be put into educating parents on what digital literacy skills are in general, how they can improve their competencies and how they can teach their children new digital skills.

1. Introduction

The research presented here is a follow up study on young children's (0-8) interactions with digital technology in their homes, in Croatia. The first study was done in 2015. This study focuses on the changes in young children's interactions with digital technology that occurred in a year and a half. As previous research, this study is also part of the framework of the JRC's Project ECIT, Empowering Citizen's Rights in emerging ICT (Project no.572). ECIT tries to identify possible threats to children that emerge besides the use of social networks and to give recommendations that aim at empowering children's rights in this domain.

Although the majority of studies of children's interactions with digital technology focuses on older children and teens (Olafsson et al., 2013), the fact is that more and more children are being surrounded by digital devices from the moment they are born. With their parents being digital experts as well, children get in touch with different devices at a very young age and in many families the use of these devices by both parents and children is part of daily routine (Kucirkova, 2011). Although, at the same time, there are many children who have very limited access to digital devices, for various reasons, research shows that children go online at an increasingly younger age, and the younger they are, the more vulnerable they are to the effects of digital technology (Livingstone et al., 2011).

In the first study of digital practices of children aged 0 to 8 in Croatia (Kotrla Topić & Perković Kovačević, 2015) we addressed four topics or dimensions: use, perception/attitudes, individual context and family context, as follows:

	INDIVIDUAL CONTEXT	FAMILY CONTEXT
USE	RQ 1 : Individual Use: children/parents	RQ 3: Family Use/Dynamics/Practices
PERCEPTIONS/ATTITUDES	RQ 2 : Awareness to risks/opportunities of the children of the parents	RQ 4: Parental Mediation Passive/active Restrictive/permissive Implicit/explicit Reverse mediation

In this study, one and a half years later, we aim to address the same research questions to investigate the changes that happened during this period.

The research was done with the help of the same families that participated in the first research project, only this time there were only five families involved. Most of the data collected from the parents and children are based on their answering the questions during an interview, and in the parents' case, also on the answers they gave in a pre-interview questionnaire.

The study is done in collaboration with a selected group of academic partners in different European countries. This report presents the key findings obtained by the Croatian research team, recommendations for policy-makers, industries, parents, schools, etc. It also describes the methodology used, the families in the sample, and gives a more detailed account of the results obtained.

2. Method

This is a follow up study on the research done one and a half years ago. Croatian research was based on a collaboration agreement between JRC of the European Commission and four Croatian researchers from the Institute of Social Sciences Ivo Pilar, Clinical Hospital Centre Osijek and J. J. Strossmayer University of Osijek.

After receiving the research materials in English, the researchers first translated all the documents into Croatian.

The next step was to find the families willing to participate in another study on the same topic. All the families from the first study were sent a pre-interview questionnaire with questions regarding their use of digital technology at home. Through the pre-interview questionnaire they were also asked if they would be willing to participate in another interview. Seven families agreed and the first five were chosen for the interview (due to practical reasons, we were not able to interview all the families). Of the remaining three families, one family moved away and we were unable to trace them, and the other two families did not return the pre-interview questionnaire.

The families that agreed to participate in another interview were visited by the same two researchers as in the first visit. In one family, the interview was conducted by only one researcher. In all five families both the parents and the children were positive about being visited again and they gladly agreed to participate in the second interview. The interview started with remembering the last visit, and the data gathered on that occasion. Together, the researchers, children and parents went through the first few questions from the pre-interview questionnaire to establish once again whether there were any new devices in the home, and if so, what they were. After this short introductory part, the children went to a separate room with one of the researchers, and the parents remained in the same room with the other one.

Interviews with both the children and the parents were audiotaped. Individual interviews with the children and the parents lasted between 45 and 60 minutes. At the end of each interview, the children were given a goody bag containing small tokens of appreciation for all the children in the family, and all the family members were thanked and asked if they had any additional questions. In most cases, parents did not have any specific questions for the researchers, but in a manner similar to the one after the first interview, they often felt the need to express some concluding remarks on their children's engagement with digital technology.

Interviews took place from January to February 2017. Transcribing and preliminary coding was done after each individual interview. Final analysis and report writing took place in March and April 2017. The analysis was done based on the transcripts, the researchers' notes and debriefings that took place while making notes after the interviews, using the thematic analysis approach. Thematic analysis is a method of analyzing quantitative data by identifying, analyzing, and reporting patterns (themes) within those data (Braun & Clarke, 2006).

3. Changes through a Family Portrait Gallery

Table 1. Some characteristics of the sample and codes of each family

Family code	Member Code	Low – medium – high family income		Ethnicity		Sex	Age	Year in school/ max level of education		Profession of the parents
HR1	HR1f37	High	*	Croatian	**	F	37	Tertiary	*	Croatian language teacher
HR1	HR1m37	High	*	Croatian	**	M	37	Tertiary	*	Geography teacher
HR1	HR1b7	High	*	Croatian	**	M	7	1st Primary	*	
HR1	HR1b5	High	*	Croatian	**	M	5	Kindergarten	*	
HR1	HR1b2	High	*	Croatian	**	M	2	Kindergarten	*	
HR2	HR2m32	Medium	*	Croatian	**	M	32	Secondary	*	Administrator/Delivery
HR2	HR2f35	Medium	*	Croatian	**	F	35	Tertiary	*	Lawyer
HR2	HR2g7	Medium	*	Croatian	**	F	7	1st Primary	*	
HR2	HR2g3	Medium	*	Croatian	**	F	3	Kindergarten	*	
HR3	HR3m41	High	*	Croatian	**	M	41	Secondary	*	Electrician
HR3	HR3f39	High	*	Croatian	**	F	39	Secondary	*	Nurse
HR3	HR3b7	High	*	Croatian	**	M	7	1st Primary	*	
HR5	HR5m37	Low	*	Croatian	**	M	37	Secondary	*	Turner
HR5	HR5g7	Low	*	Croatian	**	F	7	1st Primary	*	
HR6	HR6m44	High	*	Croatian	**	M	44	University	*	Programmer
HR6	HR6f42	High	*	Croatian	**	F	42	University	*	Self-employed accountant
HR6	HR6g8	High	*	Croatian	**	F	8	3rd Primary	*	
HR6	HR6g13	High	*	Croatian	**	F	13	7th Primary	*	

Legend for the Table 1:

* Data provided by the family
** Researcher evaluation
*** Family self-evaluation

Family HR 01

Osijek, Croatia

Family members

- Boris, HR01m37
- Doris, HR01f37
- **Lovro, HR01b7, 1st Primary**
- Luka, HR01b5, kindergarten
- Marko, HR01b2, kindergarten

Narrative

This is a family of five – mother, father and three children, all three boys. The target child is the oldest child in the family and he is now in the 1st grade of primary school. The younger two children are in kindergarten.

The family owns a computer, two smart phones, and two months prior to the interview, the father got a tablet from the school he works at. The target child is allowed to use the tablet only to go on YouTube and watch music videos and cartoons, but the tablet has no games installed on it. Also, Lovro (HR01b7) only became aware of this new device in the family in the last two weeks prior to the interview, so he did know much about using it. His favorite devices are his parents' smartphones where he likes to play games. Just as a year ago, at the time of the first interview, Lovro (HR01b7) can use the smartphones to play games only at weekends. During the week, he can listen to music and watch music videos on computer (and now on tablet) or watch cartoons. He still likes the same games and cartoons: Angry Birds, Lego Ninjago and Lego Star Wars.

> "It's what we struggle with the most, me in particular, that if we let him into this world, it will all be over and he'll become a computer freak", Doris, 37, (HR01f37).

Both parents have university degrees and are employed. The mother uses digital technology on a daily basis in her work, the father not so much. They have a relatively negative perception of digital technology and would prefer it if their children used it less or not at all, but at the same time they think that if they restrict it all together the children might miss out on some skills they might need later in life.

Unlike his brothers, who are quite uninterested in digital devices, Lovro (HR01b7) is very enthusiastic about digital technology and would gladly welcome more screen time. His parents are concerned about his inappropriate behavior when screen time is over, which is why they feel he would be better off without it all together. However, their daily obligations prevent them from banning digital devices, so they struggle to balance the two.

Lovro's (HR01b7) dream device is a smartphone.

Family HR 02

Osijek, Croatia

Family members

- Dinko, HR02m32
- Jana, HR02f35
- **Maja, HR02g7, 1st Primary**
- Mirta , HR02g3, kindergarten

Narrative

The family of four, mother, father and two daughters, did not obtain any new digital devices in a one year period. They own a family computer, three smartphones, a tablet and a Sony Play station. During this period, the tablet got forgotten and is no longer in use. The target child, Maja, (HR02g7) who used it before, now prefers her parents' smartphones because she can use them to communicate with others, although this is somethnig she rarely does. Another reason for her to prefer the smartphones is that they are always in sight and on them she can play games that she does not have on the tablet because it is not currently conneceted to wi-fi – it only has "old" games, which became

> "I'm worried that it (digital technology) doesn't become too important to her … some children go crazy when it's taken away, I don't want that to happen to her", Jana, 35 (HR02f35)

borring. The games on the smartphone are simple games, which their parents chose and downloaded so they have control over them.

Maja (HR02g7) started school and is now in the first grade. Because her parents start work in the morning earlier than she starts school, she spends about an hour a day home alone before she heads to school. During this time, she is allowed to watch television. But what she in fact does is use her mother's old smartphone which has no SIM card, but has a few simple games. By using this device, she gained new skills, which include using the phone's camera, scrolling through photo gallery, using voice recorder, etc., which she did not previously possess. When she was allowed to use her mother's active smartphone, she got acquainted with the Viber application and learned how to send messages and what she likes the most – how to send emoji to her friends. She does not send them directly to her friends, but rather to friends' mothers' smartphones because, like her, her friends do not own their personal smartphones.

The parents did not change their attitude towards digital technology. They feel digital activities can be useful and fun, but they should be supervised and controlled, which is what they try to do with their children. Jana (HR02f35) thinks the school should provide more opportunities for learning useful digital skills such as typing and creating documents, basic programing, etc. Jana (HR02f35) has a university degree and uses digital technology in her work all the time, while Dinko (HR02m32) has tertiary education and uses digital technology only sporadically in his work. Their younger daughter Mirta (HR02g3) does not show much interest in digital technology.

Maja's (HR02g7) favorite device is a smartphone.

Family HR 03

Tenja, Croatia

Family members

- Franjo, HR03m41
- Marija, HR03f39
- **Boris, HR03b7, 1st Primary**

Narrative

This is a family of three – mother, father and a son aged seven. The parents work and the boy (Boris, HR03b7) is now in the 1st grade of primary school. The family owns a television set, two computers, a set of smart phones, a tablet and a GoPro camera. Both parents use digital technology at work and at home. The child has access to all the digital devices on a daily basis, but after he finishes his homework. He owns his own tablet and a computer, but he spends a lot of time doing various other activities. Boris plays the drums and is a really talented player. The parents still try to maintain high control over Boris's (HR03b7) use of digital technology. They have very strict rules about exactly what he is permitted to do on each device. Boris (HR03b7) rarely takes his mother's or father's smartphone to text his cousins on Viber. He uses

> "Marija, 39, (HR03f39). We use digital technology more as a punishment than a reward. For example, if he doesn't fulfill his school obligations, he's punished. Every time he forgets his homework, it's because the cellphone or the tablet."

GoPro camera when he plays the drums so that after he could realize the mistakes. It is important to point out that prior to using any device he must ask for permission and the time limit.

Boris's (HR03b7) favorite games are "Street Race" and "Mindcraft". Most of the day, he uses all the different devices he is allowed to use for listening to music. The parents estimate that approximately 20% of his free time is spent using digital devices and about 80% of his free time is spent in other activities (mostly involving school activities and homework). Boris (HR03b7) is quite independent in his use of digital media, but his skills are still quite limited in range. The parents feel that although digital technology has its negative sides, they can be minimized through strict parental control. They believe there are more positive than negative sides, such as improving his skills through watching online music tutorials. Also, skilled use of digital devices is, in their opinion, important for his future. Another positive side is fast and unlimited access to information, which can be helpful for learning in the future. The parents do not single out any of the devices as being especially positive or especially negative; they consider them all the same. They believe that digital technology is omnipresent nowadays and the children cannot be shielded from it. However, the contents children use must be restricted and, after all, the children should definitely be encouraged to spend more time doing other activities. Boris's (HR03b7) favorite device is a smartphone.

Family HR 05

Bockovac, Croatia

Family members

- Mirko, HR05m37
- **Marta, HR05g7, 1st Primary**

Narrative

The family consists of only two members – the father and his daughter. The mother passed away a few years ago. They live in the country, close to the father's parents and have not obtained any new devices in a one year period. They own a television and an old laptop, which the father uses occasionally to check the prices of used tractors or other farm equipment. Marta (HR05g7) has an old mobile phone, but not a smartphone that she uses to take photos, which she then looks at and deletes so she has space for new ones.

Mirko (HR05m37) is still very critical of digital technology, again mentioning examples of children they are sometimes in contact with, who show aggression when the devices are taken away from them. He mentions that children should get basic mobile phones at a certain age to get in touch with their parents if they miss the school bus or to get in touch with their friends in case they need information about school work when they are ill, but that is all.

"When children are on them (digital devices) they don't socialize, and then later they don't know how to socialize, and then they become freaks and no one likes them", Mirko, 37, (HR05m37).

Marta (HR05g7) is now in the first grade and the school she attends does not use digital technology in class. They only play music from a CD player and on a few occasions they watched a children's movie on television, probably on a DVD player. At home, Marta (HR05g7) watches cartoons and TV shows that are broadcasted on Croatian TV channels. When her father wants to watch the news, she plays with dolls. She is practically unaware of the opportunities digital devices have to offer in terms of playing games, watching videos on YouTube or finding information using search engines. On few occasions, she played a game on her cousin's smartphone while she was visiting her, which she liked and thought it was fun.
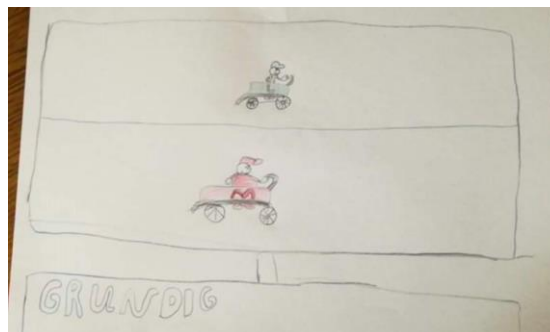
Marta's (HR05g7) favorite device is a television.

Family HR 06

Osijek, Croatia

Family members

- Zoran, HR06m44
- Sanja, HR06f42
- **Karin, HR06g8, 3rd Primary**
- Asja, HR06g13, 7th Primary

Narrative

This is a family of four – mother, father and two girls. The target child, Karin (HR06g8) is the youngest child in the family, now 8 years old, and she is in the third grade of primary school. Her older sister is in the seventh grade.

The family owns a computer, four smart phones, a Nintendo Wii, and a tablet. There is also a laptop in the house – the father works from home, so his office laptop is there, but it is used only by him and only for business purposes.

At the time of the first interview, Karin (HR06g8) had a smartphone, but it did not have a SIM card. She was allowed to use it occasionally at home while in the Wi-Fi range to go on YouTube and watch music videos or short cartoons. Now, a year later, she has a SIM card for that phone. The mother says she got the SIM card because she went on a school field trip so they wanted to make sure she could contact them in case anything

"She's (Karin, HR06g8) just not interested in it (digital technology). She's a child who needs a lot of physical contact, I mean – playing and talking with someone in person", Sanja, 42, (HR06f42).

happened. Since then, Karin (HR06g8) got acquainted with Viber and she is a member of several Viber groups with her peers from school (What's for Homework and Fun Group) and a member of her family's Viber group. However, after the enthusiastic use in the first month or so, she lost interest in this activity and uses her phone quite rarely. She tends to forget about it until the battery is discharged and the phone turns off. She then charges it after a few days and turns it on. The messages start to come in from the Viber groups but she does not always check all of them. Another digital activity Karin (HR06g8) has learnt is playing Minecraft on the home computer. She speaks of it with lots of enthusiasm, and even mentions she sometimes plays it with her father or her cousin when she visits, but in fact she has not played it in months prior to the interview. The same goes for Nintendo wii – she speaks of it as something she enjoys using very much, and then says she has not played it for over 6 months. The tablet that she used on occasions at the time of the first interview is now forgotten. She does not know where exactly it is, she does not use it and she has no need for it. She has her smartphone and it is enough for her.

Karin (HR06g8) has no strict rules about the use of digital technology, just as a year ago, because she has no particular interest in technology. When she wants to play a game on her smartphone, she plays it for a few minutes at most, and decides it is enough. For her older sister, Asja, (HR06g13), parents have stricter rules and take on a much more active role in coordinating her digital activities. The parents' perception of digital technology has not changed in a one year period. They both have university degrees and they both use digital technology for work and sometimes to relax, but it does not dominate their lives or the lives of

their children. It is not the first thing that comes to their minds when they think about how to relax or how to spend time with their children. Also, they are very cautious about how it might affect their lives in the future.

Karin's (HR06g8) favorite device is a television.

4. Findings

4.1 How did the engagement of children under the age of 8 with new (online) technologies evolve in one year's time?

- **Individual context**

During a one year period, the five **families from our study did not purchase many new devices**. To be more specific, two families have no new devices at all (HR02 and HR05), one family (HR01) just recently got a new tablet and in the remaining two families (HR06 and HR03), the children that had smartphones before now have SIM cards for those phones. This means that those families did not get a new device, but rather upgraded their old devices. In addition to that, one child (HR03b7) got a GoPro camera to record his drum playing, so he can later view it and listen to it in order to correct his mistakes and perfect his playing.

The family HR01 that got a tablet did not buy it. It is a device the father got from the school where he works as a teacher, to help him prepare for classes and to use it in class with his pupils. Therefore, the family did not have any particular expectations regarding the device, and, in fact, if it had not been given to them, they would not have even considered buying it. Furthermore, the device has been in their family for only two months, and the target child Lovro (HR01b7) only learned about it in the last two weeks prior to the interview. He is allowed to use it only rarely and only to watch YouTube videos. There are no games installed on this device, since it is not intended to be a playing device, but rather a tool to help the father in his work. Other children in the family do not use the tablet and it seems that the few occasions that led to the oldest child using the tablet were when the parents needed a way to occupy all the children with different activities (the younger children watching a cartoon on TV, and the oldest one watching YouTube videos on the tablet).

The two families that got their children SIM cards for their smartphones did so because they **needed to stay in contact with the children**. One girl, Karin (HR06g8), who is now in the 3rd grade, went on a school field trip to another city, so her parents wanted her to have the means to get in contact with them if something happened. The other boy, Boris (HR03b7), who got the SIM card in his phone, started primary school in September 2016, and this resulted in him being home alone for some time after school, before his parents come home from work. His parents wanted him to have a way of communicating with them, and a way to make sure he got home safely. Boris (HR03b7) does not use it very often and his parents say he called them only a few times to ask them something. Boris (HR03b7) also got a GoPro camera, which he uses to record his drum playing. He is a passionate drum player and he listens and watches the recordings to spot the mistakes and perfect his skills. The parents from both families did not have any particular expectations regarding these devices, except to enable them to be in contact with their children, which they now can. The decision about the SIM cards came naturally in both cases as a solution to the problem of communication. The decision about the GoPro camera was the result of careful thinking about how to help the child with his musical education. Boris (HR03b7) records his drum playing but he does not share the recordings with anyone online. He is not allowed to do so nor does he know how, but it is interesting to note that some children of the same age are known to post such videos online and even have their own YouTube channels.

Except for the tablet in the HR01 family, which belongs to the father and is occasionally used only by the oldest child Lovro (HR01b7), **other newly obtained devices belong to the children who got them and are not shared**.

As for forgotten or discharged devices, there are two families that previously owned a tablet that the child was allowed to use (HR02 and HR06), and they still do, but it is no longer in use.

The reasons for this are somewhat unclear to them as well – it seems the tablets were simply forgotten over time and substituted with smartphones (in both cases).

"*Now it's the smartphone! ... Because it's always there on the table and she keeps thinking how to grab it!*" Jana (HR02f35)

Just as the families have not obtained many new devices, the children have not obtained many new digital skills in a one year period. In fact, it seems that they, as one mother puts it: "*perfected the skills they already had, rather than obtained any new skills*" (Doris, HR01m37).

In our first study, we tried to apply the DIGICOMP framework for developing and understanding digital literacy in adults to evaluate children's digital literacy skills (Kotrla Topić & Perković Kovačević, 2015). The DIGICOMP framework refers to the framework for developing and understanding digital competence of all citizens. Our conclusion was that applying such a framework to children proved to be a problem since many of the skills described were too sophisticated for children aged 6 to 7 (Kotrla Topić and Perković Kovačević, 2015). After interviewing some of the families a year later, we still feel the skills in the framework are too sophisticated for children aged 7 to 8.

As mentioned above, **the children in this study have not gained many new skills**. The few skills that children have gained (four out of five children) are still in the domain of basic digital literacy skills and they include learning how to use the camera or the voice recorder on a smartphone, and being able to use the YouTube on their own, since they now have better reading and writing skills and better skills at downloading games on devices.

All of the children in the sample that attended kindergarten a year ago, at the time of the first study, are now in the 1st grade of primary school, so their reading and writing skills are much better. This enables them to use the search engines like Google and to find what they are interested in on YouTube much easier than before. It is interesting to note that some of those skills were gained during the time that children spent home alone, before or after school, while their parents were at work. Karin (HR05g8) is the only child in the sample that is in the 3rd grade, so she now knows how to use PowerPoint presentations on a computer and how to print word documents. She learned these new skills with the help of her parents and her older sister. Maja (HR02g7) has become more independent in choosing and starting a cartoon from a folder on the family computer, and in going through family photographs, also stored in different folders. Her mother – Jana (HR02f36), says she offered her daughter to teach her how to use the Word program from the Microsoft Office package, but she did not find it interesting and did not want to use it.

None of the children in the sample have any of the independent digital literacy skills described in the DIGICOMP framework. In fact, one child – Marta (HR05g7) has only few of the basic digital literacy skills described in the above mentioned framework.

As for specific skills regarding the use of applications that children acquired during a one year period, **a few of them mention the use of Viber** - Maja (HR02g7) and Karin (HR06g8). Karin (HR05g8) has Viber installed on her smartphone and she is a member of a few Viber groups with her family members and friends from school. Maja (HR02g7) uses Viber on her mother's smartphone and she sometimes communicates with messages with some of her friends who also use their mothers' phones, but this happens rarely.

Furthermore, **some of the children (four out of five) know what a password is and what it is for**. For example, Maja (HR02g7) knows what her mother's password for the smartphone is. She does not have much use of this information because she can use her mother's smartphone only when her mother is nearby and she gives her permission. The password is created to protect the phone in case it gets stolen. She does not know the password for the family computer, because she is not allowed to use it on her own.

"*The password is Z*", Maja (HR02g7)

"You can have a password on a computer or on a mobile phone", Karin (HR06g7).

Some children know what a password is, but they do not know it, e.g. Lovro (HR01b7).

"Password is used for locking and unlocking the smartphone. My dad has one." Lovro (HR01b7)

Some of them have a clear idea about what a computer virus is:

"It's a virus that hacks your computer and can erase your data", Karin (HR06g7).

Others have a more vague sense of the meaning of a computer virus, but they have heard of it (four out of five children).

Prior research shows that the use of digital technology increases with children's age due to the increase in their cognitive, motor and language abilities (Lauricella, Wartella and Rideout, 2015). What we found in our study is that in a one and a half year period, the children have approximately the same amount of screen time – just a little more in some cases, although their reading and writing skills are far more advanced than before, because of limits set by their parents. In situations when some children are home alone, they use the technology far more than they would if their parents were present.

- **Family context:**

Parents report no special new rules being established for the use of these new devices, except for the family that got the tablet (HR01) – they have a strict rule that no games are allowed on the tablet. This is so because the tablet is mainly to be used for the father's work obligations.

In all of the families, the parents talk to each other about digital devices and their use in the family, and it is on those spontaneous conversations that they base their decisions regarding such devices and their use. Apart from that, some parents say they also talk to friends and family about the children's use of digital technology, and one mother (Doris, HR01f37) said she reads some parenting blogs, which occasionally mention the impact of digital technology on children's lives. But the parents also report that such conversations are sporadic and that in general they do not talk about their children's use of digital devices very often.

The parents have a good perception of their children's favorite devices, and are not always pleased with their choice. One mother (Doris, HR01f37) pointed out that she would prefer her son Lovro (HR01b7) to use some device for listening to music, with that being its only feature, but in the end she said she did not really know what kind of device that would actually be.

None of the parents report any digital activity that presented a challenge for their children, and none of the children report any unusual or unpleasant events that happened while they were using digital devices. This finding is consistent with previous studies, which show that in families with restrictive mediation (type of mediation used in the most followed-up Croatian families), children are less exposed to risks, but also have less opportunities than children in families that use enabling mediation (Livingstone et al., 2017).

School context

In Croatian primary schools there are no IT classes in lower grades. Some schools offer extracurricular IT classes for younger students, but this is rare. Also, not all schools are equipped with digital devices in the classrooms. Many of them do not even have a computer in each classroom that the teacher could use for giving presentations. Parents generally feel that this is wrong and that teaching digital literacy should be part of school curriculum.

"They have two classes (per week) of religious studies and they don't have any IT or similar useful things?!" Jana (HR02f36)

They feel IT classes should be integrated in the school curriculum, for example:

"*They could have e.g. an English class and learn how to type as well.*" Jana (HR02f36)

None of the children in the sample attend any of the out of school IT programs that are available in different organizations. These classes offer introduction to programming and similar topics and are quite expensive.

Primary schools do not encourage children to use personal digital devices in class. Some children have smartphones, but they are not allowed to use them during classes. The main reason is that they would be distracted by such devices since they use them mostly to play games. Of the three children in the sample who do not have a smartphone, two of them would very gladly have one. In fact, Lovro (HR01b7) is saving money to buy himself a smartphone. Children report that some of their friends from school have smartphones and that they would also like to have them and use them to play games. They do not see it as a social status symbol, but as a source of fun. Two children from the sample do own a smartphone, but one of them (Karin, HR06g8) does not bring it to school and often forgets about it for longer periods, so the phone turns off because its battery runs out.

Without any formal education, the few digital skills the children gained during a one year period came from watching their parents or older siblings. When they encounter a problem, they ask their parents.

What is interesting is that **sometimes the parents have different beliefs in their children's skills than it really is the case**. The reason for this is that two children from the sample now spend some time alone before or after school (Maja, HR02g7 and Boris, HR03b7), while their parents are still at work. It is not a long period of time, but it is on a regular basis. During this time, Maja (HR02g7) takes her mother's old smartphone, which has no SIM card, and uses it to take photos and make voice recordings, etc. Her parents are not fully aware of this habit and it also might be that this is not something that happens very often, but it does at least sometimes. Also, Boris (HR03b7) uses his smartphone to play games after school, before his parents come home. They know about the games he has on his smartphone, and are aware that he sometimes does not finish his homework before they arrive, but they do not fully grasp how often he uses his smartphone while he is home alone.

4.2 How did the perceptions of the new (online) technologies by different family members evolve in one year's time?

Individual perception of digital technology has not changed much in a one year period. Children still love it and parents still hesitate about it.

When asked about what digital technology means to their family life, parents respond that it is **something that helps them relax in their free time, and something that is part of family rituals** – to watch cartoons together with the children. Some parents feel that it is a **good tool for learning new information and that it can help build stronger family connections** because distant family members can communicate more often using digital technology.

"*When we went to the spa for a few days, we would make short videos of some of our activities and then send them to other family members by Viber, so they could see what the kids were doing*" Jana (HR02f36)

At the same time, **parents worry that using digital technology too much might alienate children from other activities**. In relation to that, they fear the children might become

addicted to certain devices and that it might affect their health – particularly eye sight and body posture.

"*We keep telling her she can't hold it two centimeters from her nose, or her eyesight will spoil*". Jana (HR02f36)

One mother worries that her son might get "*1001 crazy ideas*" or "*ideas for various stunts*" from the Internet (Doris, HR01f37).

Another mother (Marija, HR03f39) has a particularly strong fear of her son meeting someone online who could eventually harm him. At the moment, he has no access to social media or chat rooms, so her fear is based on what might happen in the future and is initiated by a recent tragic killing of a teenage girl in Croatia, who was murdered by a person she met online.

Children are still quite unaware of possible negative sides of using digital technology, apart from the fact that it might ruin their eye sight and that if affects their behavior.

"*I'm not supposed to look at it for too long because it can hurt my eyes. My grandpa says so, and he knows, he's a doctor*", Lovro (HR01b7)

Boris (HR03b7) knows that "*someone might contact him over the computer*" and is instructed to tell his parents straight away if something like that happens, but he does not really understand how someone could contact him because he does not use any communication tools on the computer.

When asked what they would **recommend to other parents of small children regarding digital technology,** the parents most often mention they would advise other parents to give their children access to digital technology as late as possible. Another advice most of them agree on is to always monitor and control their children's interactions with digital devices. These pieces of advice are something that the parents themselves do not always apply.

"*Hold them as far away as possible for as long as possible*" Sanja (HR06f42)

"*Start as late as possible, not before five years of age*", Doris (HR01f37)

"*Limit and control*", Jana (HR02f36)

Furthermore, one mother advises that when children start using digital technology they should be offered "*the smartest games*" first (Doris, HR01f37). By smart games she means games that teach letters, numbers, colors, shapes, etc.

Another mother advises parents to "*start naturally and slowly, spontaneously, without forcing anything*", Sanja (HR06f42).

4.3 How did parents' mediation of young children's use of (online) technologies evolve in one year's time?

All of the parents in this sample show an active and restrictive style of mediation when it comes to digital technology, just as they did a year earlier. Except for the family that practically uses no devices at all (HR05), apart from television, all the other parents allow their children a certain amount of screen time, but try to have strict rules about what, when and how long the children can use digital devices. In literature, there are two parental mediation strategies described in parents of 6- to 14-year olds: enabling mediation, which is characterized by increased online opportunities, but also risks, and restrictive mediation, with fewer online risks, which sees media use as primarily problematic (Livingstone et al., 2017). Parents in this study can be described as using restrictive mediation.

While **the tendency of these parents to restrict and control their children's screen time has not changed in a one year period**, on a daily basis, things are a little different than before. This is mostly the case because some of the children spend more time alone then before, and this time is often correlated with the use of digital devices. Parents feel they cannot ban the use of devices during this time because they think the children need it to be occupied and not to worry or be scared if they start thinking about the fact that they are home alone. That is why they try to instruct their children on the devices they can use or the activities for which they can use them. According to Nikken and Jansz (2014), his type of mediation is a restrictive mediation ii, in which parents restrict content by, for example, banning certain sites or devices, but at the same time are more flexible to the time restrictions.

In four out of five families, the parents (one or both) use some form of social media and in three families, the parents use digital technology in their work on a daily basis. Prior research shows that parent modelling of digital technology use might influence the way in which children use the devices (social cognitive model; Bandura, 1977). However, none of the children in the sample have access to social networks and chat rooms. Most children are aware of these sights but are not allowed to access them. On rare occasions, parents show them photos shared by family members or close friends.

Research also shows that parental mediation of the Internet use is practiced more by educated parents, as well as by parents with better digital skills or by parents of younger (less skilled) children (Nikken & Schols, 2015). In our study, the parents limit their children's possibilities to go online, mostly because they feel the children are still too young to understand the positive, as well as negative possibilities the Internet has to offer. When online, the children download games from the sites they already know and that require no logging information. This way, the parents try to ensure that there is no chance of children making unauthorized purchases. When children search for information about something that interests them, they mostly do it with the help of their parents. They use the YouTube to watch videos and cartoons, to listen to music and a few of them know how to use Viber to send messages and emoji.

Parents say they sometimes use digital technology as a means of punishing and rewarding the children's behavior. For example, Doris (HR01f37) explains they have difficulty getting Lovro (HR01b7) to hand them the device once the time he is allowed to use it is over. He refuses to finish using it and often gets cranky and cries after that. So, they try to encourage him to behave well in those situations and try to explain that if he changes his behavior he will be allowed more screen time. But this strategy has not worked so far.

"If he behaves well and if he's good, he will be able to use it longer… we encourage him, but it still hasn't come to the point that he recognizes it", Doris (HR01f37)

Three of the five families interviewed in this research have more than one child. We were interested to know if there are different rules for children of different age in the same family regarding the use of digital technology. The parents report that there indeed are different rules, but that they are not related so much to the children's age, which would be our first assumption, but rather to the children's personal interests in digital technology. For example, the family HR06, in which the target child Karin (HR06g8) is the younger of two children, the mother says she has always been fairly uninterested in digital technology, and although she likes to use it on occasions, the parents never needed to restrict her time in such interaction. On the other hand, the older daughter in the family, Asja (HR06g13), has much more elaborate rules about digital technology in regard both to different activities and devices, as well as the time spent using them.

Other two families have children who are younger than the target child (HR01 and HR02). They report that these children have less interest in digital technology than their older siblings. In fact, they are uninterested in digital activities to the extent that the parents cannot use digital technology as a way of rewarding or punishing their inappropriate behavior.

"*Mirta, she is not interested in anything, she just likes candy and food as a reward*", Jana (HR02f36)

"*They watch a cartoon or two and that is it. It's not something so important to them (younger siblings)*", Doris (HR01f37)

4.4 Has the role that these new (online) technologies play in the children's and parents' lives changed over a year

When comparing the five families interviewed in this study now and at the time of the first interview, generally not much has changed, from both perspectives – those of the children and those of the parents. Out of the five families interviewed in this study, in four of them digital technology is integrated in their daily lives, but it does not dominate them. One family (HR05) has very little interaction with digital technology and they are fine with that.

Dynamics of family life has changed for the four families in which target children started primary school since the first interview. The families are dealing with these changes in various ways and digital technology plays a part in this. Two children spend some time during the day unsupervised, and during this time, they use digital devices. For the time being, there have been no incidents and no special situations regarding this use, but it is worth mentioning that parents are considering this as a potential threat for the future. In short, **life circumstances have changed and families are adapting to these circumstances the best they can. They still try to maintain the same screen time limits.**

As for the new skills, the children seem to have perfected the skills they already had, without gaining many new, more advanced skills. The school does not teach them digital literacy skills nor does it encourage the use of digital devices in class. The children improved their skills by watching their parents or older siblings use the devices or by trial and error method, just as before.

In school, children do not regard digital devices as status symbols, but want to hang around other children who do have such devices because they find the devices to be the sources of fun.

4.5 Surprising findings

When we look at the content of digital activities of the children in the sample, we find that gender differences are not expressed as much as it would be expected. In this second study, there are three girls and two boys, and they all have their preferences when it comes to games they like to play and applications they use. Karin (HR06g8) enjoys playing Minecraft and Nintendo Wii, while Lovro (HR01b7) plays Angry Birds, Lego Ninjago and Lego Star Wars. Maja (HR02g7) plays Angry Birds and Super Mario, but also simple games like feeding the pets or arranging puzzles. She sometimes plays more "girly" games as well – dressing up for example. Boris (HR03b7) plays Street Race and Minecraft, or simple games on Friv. Marta (HR05g7) does not play games on digital devices.
Prior research points to gender differences in relation to online practices of children under 8, especially concerning the choice of apps (Chaudron et al., 2015; Marsh et al., 2015). Girls more often choose apps with princesses and pets, while boys more often choose apps with super heroes and sports (Marsh et al., 2015). The children in this study do not show such clear gender preferences, but we have to be careful before making broader conclusions because this is a very small sample.
There is no uniform reason for the girls' preference of what are considered more "boys'" games. Neither of them has an older brother in the family (nor a younger one). It seems it is more a

question of personal preference for Maja (HR02g7) and maybe the father's influence for Karin (HR06g8) since she mentioned she sometimes plays Minecraft with her father.

5. Discussion

The families in this study did not purchase many new devices in a one year period. This means that they all own a television and a computer (either a desktop computer or a laptop), four out of five families own a tablet and a smartphone(s), and two families own other playing devices. Even with this small sample, the data about ownership are in accordance with the data from other countries. For example, in a study by Laucirella, Wartella and Rideout (2015) all the families with children under 8 owned a television, 86% of them owned a computer, 69% a smartphone and 40% of the families owned a tablet.

When asked about the reasons for not obtaining any other devices in a one year period, the parents report they simply had no need for them. In fact, all the parents in this study try to limit their children's screen time and acquiring new devices, especially for children's personal ownership, would probably lead to more screen time in general. One family (HR02) said they were thinking about getting Nintendo Wii, which would be owned jointly with other extended-family members, so the children could play some sports on it for a while and then send the device to cousins for a month, or some other similar arrangement.

Favorite device of most children in this study is a smartphone (three out of five children). The other two girls prefer television. One of them is a girl named Marta (HR05g7), who does not have a smartphone and neither does her father. The other girl whose favorite device is television is Karin (HR06g8) and she simply prefers it over her smartphone, but uses both devices very sporadically. This is quite unusual, since prior research shows that in other European countries children prefer tablets to smartphones (Kabali et. al, 2015; Merchant, 2015). The reasons for preference of smartphones in the Croatian families included in the study are not quite clear even to the children themselves. This phenomenon is even more interesting if we consider that three of those children own a tablet and for some of them it was a favorite device a year ago. But it seems it somehow got forgotten with time. At the same time, smartphones were used either by their parents or themselves, so they were uploaded with new games, or the children discovered that they can be used to communicate with others. The games children play on smartphones can easily be downloaded and played on the tablet, so it seems it is not a question of software or any operational feature. It is more a question of practicality – when asked about the tablet, the parents would explain it was there somewhere, but its battery must have run out. This might mean that if the children often forgot to charge the tablet, the parents' and later their own smartphones became more desirable devices, simply because they were operational.

Children did not get a lot more screen time in a one year period. The only two children who did get more time to use the devices are the two school children (HR02g7 and HR03b7) who occasionally spend some time home alone. If it were not so, they would probably have the same amount of screen time as before starting school. Prior research shows that the use of digital technology increases with children's age due to increase in their cognitive, motor and language abilities (Rideout, 2011, 2013).

Furthermore, it is worth noting that other research shows that the use of digital technology helps develop reading and writing skills, as well as language acquisition (Chaudron et. al. 2015; Marsh et. al. 2015), but in the case of the children in the sample, it seems better reading and writing skills enable the children to use the devices more independently and proficiently.

In this one and a half year period, **the children's preferences for games and applications have also not changed much.** They mention the same brands as the targets of their interest – Lego Ninjago, Lego Star Wars, Super Mario, etc. They watch cartoons, play games, or watch short video clips on these themes. What did change is that one boy, Lovro (HR01b7), started to watch music videos on YouTube, something he did not do as often a year ago. Prior research shows that children's preferences regarding the YouTube content change with age, with younger children preferring TV programs, short films and cartoons or songs, and the children older than 8 preferring music videos, funny videos and videos uploaded by different bloggers.

None of the children in the sample reported any negative experiences with the use of digital technology. This is not surprising, since in all of the families the parents have restrictive mediation strategies. It has been shown that such mediation is associated with less risk exposure, but also less online opportunities (Mascheroni, Murru, Aristodemou, & Laouris, 2013). Other researchers also found that authoritative (restrictive plus active), but also authoritarian (just restrictive) strategies were associated with the fewest online risks (Rosen, Cheever and Carrier, 2008).

One of the parents in the study, Mirko (HR05m37), restricts his daughter's access to digital technology so much that apart from watching a few cartoons on television she basically has no interactions with digital technology. He uses a modification of what Livingston et al. (2011) call a technical mediation. Technical mediation is usually aimed at software control, but Mirko (HR05m37) uses hardware control. Marta (HR05g7) does not object to that, she is relatively unaware of the possibilities that digital technology has to offer. We feel it is important to note she is a happy child and does not feel she is missing much because she does not have some of the devices that her friends might have, because it is generally considered that children cannot go on and live satisfying lives without digital technology. Marsh et al. (2017) also highlights the importance of researching the issue of difference, diversity and equity in the research of the impact of digital technology on the childhood of children nowadays.

Parents hesitate about the children's use of digital technology because, at the moment, they do not find any specific positive outcomes from the children's screen time. One of the reasons for this is that the children mainly use digital devices to relax and have fun. They rarely use them for studying or learning some new digital literacy skills. In fact, except for one girl who is in the third grade (Karin, HR06g8), other children do not know how to use them more efficiently for studying, and no one teaches them. Karin (HR06g8) can combine information gained from the library and from the Google search engine or, for example, make a PowerPoint presentation. Other children in the sample are quite unaware of the possibilities that digital technology provides in terms of digital literacy or they do not find them interesting. They do not often ask and they are not often offered a possibility to learn anything other than how to download a game or an application. When this is paired with limited screen time in general, the children do not have much choice than to use it for what they like most – playing games, listening to music, watching cartoons or videos, in other words – relaxing and enjoying.

Also, the parents often have negative attitudes towards digital technology, but they cannot exactly elaborate why. From their perspective, it often seems that digital technology is a "monster hiding in the closet" – they fear it and they advise other parents to start allowing their children screen time as late as possible. Sometimes, it seems that the parents themselves do not know how to best use digital technology to maximize its potential benefits; they are unsure what to do and how to approach this problem, so out of ignorance they try to limit and control their children's screen time. Nikken and de Haan (2015) have done a research on parents' competence in mediating the child's use of digital media. They have shown that if the parents perceive digital technology as something that is positive for their children, they have more faith in their own mediation practices. On the other hand, if they have a negative perception of digital technology they are less confident about their mediation strategies (Nikken and de Haan, 2015).

Limitations of the study

The biggest limitation of this study is the small sample size. This study presents a follow up of some of the families interviewed one year earlier. Its major shortcoming is that not all of the families from the first study were included. The reasons for this selection were technical in nature – one family from the first study moved away, some families were not interested in participating again or had difficulties finding the time to organize the visit. Another problem was the time frame – deadlines needed to be kept, so the team had to start the interviews with the families that returned the pre-interview questionnaire and agreed to participate in the second study. In the end, this strategy resulted in a sample that did not include some of the least restrictive families with regard to screen time. This might have affected the results because we do not know about the changes in those types of families.

Prospective and future

The future studies of this type should strive to achieve larger samples and try to include families with different attitudes towards digital technology.

6. Conclusion

This report presents the results of a follow up study on young children (0-8) and digital technology, first done one and a half years ago (Kotrla Topić & Perković Kovačević, 2015). In the first study, we wanted to find out what devices children aged 6 or 7 used, what they were using them for, what they thought and how they felt about using such devices and why that was. Furthermore, we wanted to find out what their parents thought about their engagement with digital technology – what were their perceptions of risks and opportunities, how much time they allowed their children to use the devices, to what end and why that was so. In this follow up study, we focused on the changes that happened in regard to same research questions, in a period of one and a half years.

The main difference between the first and the second study is the sample size. The first study included ten families, and this study included only half of those families.

Results show that not much has changed when it comes to children and digital technology in their homes. Families did not obtain many new devices, and children did not gain many new skills. Digital technology is still considered to be an integral part of lives of the five families included in the sample, but it does not dominate their daily routines. In some families, the children gained a little more screen time because the family life circumstances changed as children started the first grade of primary school in September 2016. Parents are not happy about this change. The children still enjoy using digital technology and would probably gladly welcome even more screen time if they were allowed.

For some children, there has been a slight shift in preference of devices, from tablets to smartphones. Only two out of five children have their own smartphones, but two more children are occasionally allowed to use their parents' smartphones. They all use them to play games and watch videos on YouTube, and more rarely to communicate with friends or family. The children prefer to use the devices on their own, for the purpose of having fun. However, the most dominant form of interaction with digital technology, in four out of five families in the sample, still involves watching television. Watching television is something younger and older siblings can do together and it is something that their parents join in on some occasions.

As for new skills that the children gained in little over a year, they include learning how to use the camera or voice recorder on a smartphone, being able to use the YouTube on their own since they now have better reading and writing skills and better skills of downloading games on devices. When it comes to specific skills regarding the use of applications, which the children acquired during a one and a half year period, few of them mention the use of Viber. On the other hand, the children have a better understanding of the difference between online and offline activities, they know what a password is and most of them have heard of a computer virus.

Not much has changed in the parents' perception of digital technology – they still first emphasize the same potential negative effects of digital technology: addictive behavior, aggressive behavior, consequences for the eyesight and posture and the fact that other areas of life might get neglected if children have too much screen time. As positive implications, the parents mention acquiring digital literacy skills and the help of digital technology in acquiring various other skills. At this point, now that all the children from the sample are in primary school, the parents more often mention the need for formal education regarding digital literacy skills (which is, in fact, lacking in Croatian schools). Since the sample in this research is smaller than in the first study, all the parents in the study have restrictive mediation strategies in terms of screen time and also in terms of content.

The future studies of this type should strive to achieve larger samples and try to include families with different attitudes towards digital technology.

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8. Annexes

Young children (0-8) and digital technology: Second interview Research Questions Chart v.01_2016
Protocol for interviewing children

 This protocol has been built to monitor changes between two interviews in the same family, at a distance of one year time or so, over the following dimensions

1.   **Devices: new, drops, expectations**

2.   **Activities/Interests/Opportunities: new, drops**

3.   **Skills: Kind of skills that children have acquired, lost**

4.   **Mediation/rules**

5.   **Perceptions: the way they see digital technology, the same as before, different?**

Additionally, we will also monitor the effect of the first interview on the 5 points above.

The general focus on the interview is monitor change and its reason. The WHY did it change?

Important remarks

*** The targeted child (children in case of twins) remains the same for comparison purposes even though the child might be older than 8 years old by the time of the second interview*

*** This protocol provides questions that are to be considered as a collection of questions in which the interviewer are invited to pick the relevant ones. It can be considered as tool box full of tools (questions) that at the end will help in monitoring the change in the interview family over the 5 dimensions.*

Introduction - recalling memory

The first set of questions is meant to provide the context of the first interview back in the memory of the interviewees and so it's content.

It starts with localizing the interview back in time: the week-day, the time of the day, the weather conditions, and any specific things that you collected in the first interview that you can already feel might have changed over time (you were 6 months pregnant, your car was just brand new, you had just two kittens,…

Example:

> Do you remember when we came last time?

It was a rainy/sunny/ Saturday morning of September. You were just back with (the target child) from ballet classes

(...)

It follows with recalling them the object of the interview and the research.

What do you remember of your last conversation? The subject? The questions? The feelings?

and any other question that will support this goal of recalling the moment of the first interview and its content.

The following questions opens the core of this interview, the focus on change over time in practices, usages, behaviors, perceptions of the digital technology in family of young children by the different family members.

1.   **Devices: new, drops**

[To remind the child the devices it owned/used/favorite at the first interview]

- I remember you had /used/ owned a x,y,z, …
    - Do you know where they are?
    - Do you still use them?
    - Is it still yours / yours dad's mum's … ?
- *[if relevant] I remember you were expecting to use /to own (your dad's old phone, a new aps for Christmas, a laptop/smartphone for school, …), did you get it? or another? or are you still expecting it?*
- What new device do you use/own? How come do you have/use it? (WHY)
- I remember your favorite one was X, now from the first activity, the table 'my digital family we just did together with your parents',
    - I see that it is still X, is it correct?
        - Why so?
        - What can you do with it that you cannot with others? (if any)
        - What can you do better with it than with the others? (if any)
        - Do you think it will be the same next year?
    - I see it is Y now, is it correct?
        - Why so?
        - What can you do with it that you cannot with others? (if any)
        - What can you do better with it than with the others? (if any)
        - Do you think it will be the same next year?
        - What happened to your old favorite one?
        -
2.   **Activities/Interests/Opportunities: new, drops**
- [Referring to the favorite device] What do you do with it? (you watch youtube?, you game? you take pictures, video? You edit pictures, video? you paint? you write? it helps with your homework? you contact your friends, your family?)
- I remember you were very fan of X and you used to (watch videos on the topic, draw, search information on, was part of online community, playing it with friends online, with your dad, your sister, Grand-ma, ….)

(**)

- Is it still the same? YES
    - Do you look for the same kind of videos, information, pictures?
    - Do you share it with the same people? (friends, siblings, family members, teachers, babysitter, people online you never met?)
    - For example what did you do about it yesterday/ few days ago/ last week-end?
    - Where do you do this/these activity/ies?
    - Where do you actually prefer doing this/these activity/ies? Are you allowed to?
    - When do you do this/these activity/ies?
    - When do you actually prefer doing this/these activity/ies? Are you allowed to?
    - Do you think it will be the same next year?
- Is it still the same? NO
    - So, what are you interested in now?
    (If the interests are unchanged, this question might show also just a change caused by migration of the activity to another device (for instance, watching TV on the tablet)

    - That is a change, why did you change?
    (This question will help us to monitor change in interest, in skills, as they could answer 'it is boring now, it is childish, I can read now, …or change of rules from the parents, of access to a device, influence of new friends trends, growing effect - 'it is boring now', 'I can read now,', no time anymore, negative experience, ...)

    - What do you do to support your interest in xxx? (focusing on digital technology, we can prompt them on :watch videos on the topic, draw, search information on, being part of online community, playing/watching it with friends offline, online, with your dad, your sister, Grand-ma, ….)
    - Do others know about this change (family members, friends, …)? What do they think about it?
    - For example what did you do about it yesterday/ few days ago/last week-end?
    - Where do you do this/these activity/ies?
    - Where do you actually prefer doing this/these activity/ies? Are you allowed to?
    - When do you do this/these activity/ies?
    - When do you actually prefer doing this/these activity/ies? Are you allowed to?
    - Do you think it will be the same next year?

- I remember you **were also doing those activities Y, Z**, … and you used to (watch videos on the topic, draw, search information on, was part of online community, playing it with friends online, with your dad, your sister, Grand-ma, ….)
  rephrase questions (**) of the previous paragraph

- I remember you **also wanted to do those activities Y, Z**, … and you used to (watch videos on the topic, draw, search information on, was part of online community, playing it with friends online, with your dad, your sister, Grand-ma, ….)
  rephrase questions (**) of the previous paragraph

3. **Skills: Kind of skills that children have acquired, lost**

- What skills would be needed for being good in your X (favorite activities) ? What do you need to know, what do you need to do in order to be good in X (your favorite activities)?
- How do you know that those skills are important?
  (The question seeks to obtain information about the ways children develop their skills and gain knowledge about an activity/game, etc. A rephrase of the question could be: Where/when did you learnt that these skills/things/actions are important to be good in X activity?)

- Can you do all this yourself? Are you able to do it yourself ?
- Was or is it difficult to learn? Did you have to try several times? Did it take long to pick up?
- I remember last year, you could do X, Y; Z... is there something you do not do anymore? or less often?
- Did you learn anything new with technology over the summer break?
  (This question is to focus on activities out of school, in an informal environment. 'over summer' helps also the child to picture him/herself back in time)

- Did you learn anything with technology new during the last weeks, since school started again?
- How did you learn yourself? When (after school, week-ends, at school, during lessons, during breaks, …)? With whom?

- ❏ school teacher (1)
- ❏ friends at school/ schoolmates (2)
- ❏ friends not at school (2)
- ❏ mother (3)
- ❏ father (4)
- ❏ siblings (5)
- ❏ grandparents (6)
- ❏ other adult family members (7)
- ❏ other young family members (7)
- ❏ themselves (8)
- ❏ other (9) _____
- ❏ I do not know (10)

- Do you think that those skills (things you know to do) that you learn through X (your favourite activity) are useful for other things? Which one for example?
  (It might be a difficult question for the children but let's give it a try)

- Are you envious of or inspired by the skills of someone? (a parent, a sibling, a friend, a cousin, …). Why?

- Did you teach or being supportive with someone about technology? What did you pass on, to whom? Did it work?

    o school (1)
    o friends at school(2 a)
    o friends out of school (2 a)
    o mother (3)
    o father (4)
    o siblings (5)
    o grandparents (6)
    o other adult family (7 a)
    o other young family members (7 b)
    o themselves (8)
    o others (9) …

Specifically about gaming :
- when you LOSE / WIN at this game, do you celebrate? Are you happy? Frustrated? Exhausted? Relief? Full of joy? Tired? Full of energy? Sleepy? With the will to play again? Ashamed? Do you scream? Do you jump? Do you through objects? Do you shout at people?
- Do you share your performance with your parents, your siblings, your friends, at school …

4. Mediation/rules

Are there some digital activities that you are not doing anymore? (watching youtube, cartoons, music, vlogs, tutorials, …. gaming at particular games, taking pictures, videos, drawing, editing them, using skype, SN, ….)

Why? Is it boring now? not interesting anymore? **are you still allowed to?**

Permission

I remember you **had to ask permission for** … / you could do YY only after homework / on weekends / in the kitchen only / … Is it still the case?

I remember you **did not have to ask permission for** … / you could do YY, XX at any time… Is it still the case?

When and for doing what do you need permission from your parents or other adults?

Password

What is a password? What is the use of a password?

- Do you need password to access a smartphone/ tablet/ game console/ laptop/ PC/ TV…? Do you need password to access a game? What kind of password, figures, or shape, words, digital print, …?
- if YES (***)
    - Is the password new? Was it there before summer?
      ('before summer' helps the child to picture him/herself back in time)
    - Who has the password? You? your parent? your siblings? your friend? Did you share it with them? how come they know it?
    - Why is there a password there? what does it help?
      (This question seeks to see if the child can feel or see a purpose of putting a password of access on a device. If yes, which one)
- if No (***)
    - Did you ever have to use a password? If Yes, when was it? Before Summer? Before Christmas? When you were at kindergarten?
- Have you ever created a password? Did someone help you ? Does someone know it? With whom would you share it?

Help

When do you need help with technology? What for? In what moments? Searching information online, installing apps, enter in a game, …

- Who do call for help? (Siblings, parents, grand-parents, friends, teacher…) Do they usually help? How? Do they help you by teaching/showing you what to do? Or the are just solving that problem to allow you to continue?
- Do you like this help?
- Since summer, did you help anyone with technology?

Safety mediation

Did you ever find yourself in a weird or uncomfortable situation with technology since summer?
    [This question seeks to see if the child would like to report uneasy situation that they experienced with digital technology use like 'funny' videos or games, … The reference in time since summer' is to help the child to picture him/herself in time.]
- If Yes,
    - What did you do?
    - What will you do if it happens again?
    - Why these things happen?

- Since summer, did your mum or your dad talk with you about things that is better not to do with technology? of things you have to pay attention to while using technologies? Things that you have to report to them?

- Did you ever hear about that? From where? From whom? Did anyone else talk to you about that?

- [If computer virus were not mentioned yet] Do you know what a computer virus is?; Who told you, you remember? Do your computer ever get virus? What did you do? [This set of question has been added on the suggestion of Rita. In Portugal children did not talked about this but we didn't and either! And in Norway this was largely mentioned for the children. Such question might help to understand if there is really a difference and why]

Co-usage or not

Do you use technology with your parents? Which devices? for which activity?
- Do you ask your parents to share this activity with them or do they come to you and propose this activity? Did you share this activity last week? How many times? Where were you? Did you share this activity before summer as well or is it new?
- When you use technology on your own or with other children (siblings, friends, cousins,..) Where do you do that ? Where are your parents (and other adults of the household) What do they do? Was this situation the same before summer or is it new?

Rules – Time

I remember you **could play/ watch/ draw, … for XX (20 min, 1 hour…)** Is it still the case? Can you 'play' longer or play less? Do you feel that you 'play' more or less than before

summer? Before last Christmas? Why do you think? *(New rules? new activities? no more devices? new devices? request from school?)*

- How can you tell that you have 'played' that time? Do you use a watch?
- What do you do if you want to 'play' more? *(this will tell us how the rule is implemented)*
- What happens if you complain about the rule?
- Was it like that before summer? Before Chirstmas?
- If you have to use technology for school are the rules still the same?
- I remember you **did not have to ask permission for** … / you could do YY, XX at any time… Is it still the case?
- When and for doing what do you need permission from your parents or other adults?

Rules - Space

I remember you **could/could not play/watch/draw … in the garden/ in your room/ at school/ at the restaurant...** Is it still the case?
- If YES,
    - Are you happy with this?
    - Would you like it to be different?
    - Do you think it will change next year or when you are older?
    -
- If NO,
    - So what happen? Could you use it now / or not anymore in XX ? WHY so?
    - Are you happy with this?
    - Would you like it to be different?
    - Do you think it will change next year or when you are older?

- Is this rule the same for you, for your siblings, your cousins, your friends … ? WHY?

Rules - Social

I remember you *Social rule* *(like had to turn off technology when you had friends over or visits, or had to wash your hands before using technology, ...)*. Is it still the case?
- If YES,
    - Are you happy with this?
    - Would you like it to be different?
    - Do you think it will change next year or when you are older?
    -
- If NO,
    - So what happen? Could you use it now / or not anymore in XX ? WHY so?
    - Are you happy with this?
    - Would you like it to be different?
    - Do you think it will change next year or when you are older?

- Is this rule the same for you, for your siblings, your cousins, your friends …? WHY?

5.   Perceptions: the way they see digital technology, the same as before, different?

Card game and Smiley: Categorization of activities and devices between like/neutral/do not like

- Why is this your favorite one?
- Why is this the one you like the less?

(Confronting the results with 1st interview)

- I remember it was not the same last time? Why so?
+ Ask the % coded questions if you have not before in the interview.
- Can you live without your favorite technology ?
- I remember that you told me that digital technology could be **bad** for (eyes, brain, school, ….). Do you think it still? Do you see other bad things now? Why ? Did someone told you so? Whom? Did you experience something?
- I remember that you told me that digital technology could be **good** for (relax, play, homework. ….). Do you think that way still? Do you see other good things now? Why? Did someone tell you so? Whom? Did you experience something?
-

Tips/Advices

- What would be your advices/tips to other children for using technology at its best, having good time, avoiding bad time?

Imagine your perfect device (if enough time, ask drawings of it too)

- **Do you know if your mum or dad had or could use your *favorite device* when they were your age?**
- **if NO,**
    - **Why?**
    - **What was their favorite toys? Do you know?**
- **if yes,**
    - **Was it the same?**
    - **What it their favorite device too? Do you know?**

So now, to finish, imagine your perfect device

- What would it look like?

- What could it do?

- How big would it be?

- Would you share it? With whom? Why?

- Would you be ready to spend some money to buy it yourself?

Closing

Young children (0-8) and digital technology: Second interview Research Questions Chart v.01_2016
Protocol for interviewing parents

This protocol has been built to monitor changes between two interviews in the same family, at a distance of one year time or so, over the following dimensions

1. **Devices: new, drops, expectations**

2. **Activities/Interests/Opportunities: new, drops**

3. **Skills: Kind of skills that children have acquired, lost**

4. **Mediation/rules**

5. **Perceptions: the way they see digital technology, the same as before, different?**

Additionally, we will also monitor the effect of the first interview on the 5 points above.

The general focus on the interview is monitor change and its reason. The WHY did it change?

Important remarks

** *The targeted child (children in case of twins) remains the same for comparison purposes even though the child might be older than 8 years old by the time of the second interview*

** *Please, make sure that the parent who answer the pre-questionnaire is the one who is interviewed.*

** *Please, let parents know that you will (perhaps) raise slightly the same question along the interview. Make sure they understand this is a research tool.*

** *This protocol provides questions that are to be considered as a collection of questions in which the interviewer are invited to pick the relevant ones. It can be considered as tool box full of tools (questions) that at the end will help in monitoring the change in the interview family over the 5 dimensions.*

Introduction - recalling memory

The first set of questions is meant to provide the context of the first interview back in the memory of the interviewees and so its content.

It starts with localizing the interview back in time: the week-day, the time of the day, the weather conditions, and any specific things that you collected in the first interview that you can already feel might have changed over time (you were 6 months pregnant, your car was just brand new, you had just two kittens,…

Example:

> Do you remember when we came last time?
>
> It was a rainy/sunny/ Saturday morning of September. You were just back with (the target child) from ballet classes
>
> (...)

It follows with recalling them the object of the interview and the research.

> What do you remember of your last conversation? The subject? The questions? The feelings?

and any other question that will support this goal of recalling the moment of the first interview and its content.

The following questions opens the core of this interview, the focus on change over time in practices, usages, behaviors, perceptions of the digital technology in family of young children by the different family members.

Each section will start with a couple of questions that will drive the interviewee towards his/her memory on a particular point of the first interview. They will be marked in Blue.

Moreover, you will found comments that will help you with the questions into [...], The comments will help you to understand the purpose of the question or the importance of linking it with another questions or with a part of the pre-interview questionnaire.

Example:

> *[Confront this answer with **Q9** of the pre-questionnaire 'From who did your child learned to use his/her favorite digital technology?']*

1.   Devices : new, drops

We remember that in your household you had X/Y/Z, do you know where they are now?

We know from the pre-interview you have X/Y/Z: is it correct?

We remember from our previous interview that you had A, B, C in the household, we think that X/Y/Z is new:

-   Is it correct? Any other that you might have forgotten?
-   How it has come to your home? do you wanted it? Did you buy it yourself? Did you receive it? Do other relatives/social circles have it as well?
-   Did you expected the device to be useful to you or for a particular thing/activity? Did it met your expectations?
    -   if Yes, how? Would you recommend this device to others?
    -   if No, how? Do you regret having this device?
-   Do you prevent the access of your children to the device in a way or another? What are the measures? Does it work? Are they the same strategies as last year?
-   You said in pre-questionnaire that you share/ do not share this device/these devices with your child ? Is it correct? Was it a decision you took or it just came naturally? Why?
-   Were you afraid of how to handle the new device with your children? Why?

- (if relevant) How do you manage the age difference in-between your children for accessing the device?
- Do you exchange about your strategies with partner/parents/family? members/friends/school parents/ teachers/other community? Did you have to set different measures?
- Do you have any source that you trust because it offers good tips and advices? E.g. blogs, journals, friends, school evenings, museus ,... Did you ever trust them? How do you know about them? Have you recommended?

2. Activities/Interests/Opportunities: new, drops

joined with

3. Skills: Kind of skills that children have acquired, lost

[This first question will remind the context. The aim is to make the transition from devices to activities/skills]

(Referring to the favorite device) We remember from the family portrait that your child used to use X/Y/Z device for activities like watching YouTube/gaming/taking or editing pictures/video/painting/writing/doing homework/contacting friends or family. Its favorite device was X at the time of the first interview. In the pre-interview questionnaire you gave us devices X, Y, Z as the three most favorite of your child. From the activity "my digital family" that you draw all together at the beginning of this interview we saw that your child claimed having X /Y as its favorite.

- is it a surprise for you? YES/NO, Why?
- Would you prefer your child having a different favorite device? YES/NO, Why?
  [Question on perceptions] [Note that this question is a bit different to the one "Do you regret having this device" (dimension 1). Avoid the question in case it has been commented before.]

Activities and skills

We remember your child like to do X/Y/Z. *[This question opens a set on activities and skills]*

- Are they still enjoying it?
- Did you see that your child dropped some activities since last year? Which one? Why do you think it happened? And when the school started again?

Your child was able to X/Y/Z (e.g. download an app, searching a video on YouTube, exchange messages on Facebook). In the questionnaire you said your child is capable of X/Y/Z now.

[Confront this answer with Q7 and 8 of the pre-questionnaire on perceptions]

- How do you know that they are capable of this? Did they tell you? Do you see them? Do you though them? Do you do it together? …
- Did your child learn anything new over the summer? Can your child do something new with digital technology since the summer? Since the start of school?

[This question is meant to have information on formal (at school) and informal learning (out of school), The emphasis on "summer" and "start of school" is helpful to differentiate formal and informal contexts]

- How did they learn the new skill(s)? (parent showed them, contact with other children, other family member, summer camp, school, workshops, museums, libraries, cultural events, YouTube, they learn by themselves …).

- When did you realize that they were capable of this new skill? [*specially relevant if the parent says that children "learn by themselves"*]
  [*Confront this answer with Q9 of the pre-questionnaire 'From who did your child learned to use his/her favorite digital technology?'*]

Learning strategies

Is your child being challenged by any particular digital activity?

- How is he/she facing the challenge? What are their learning strategies?
- Were they the same as last year's?
- Where new learning strategies come from?
- Are you comfortable/happy with those new skills?
  - If yes, why? In which way do you think is it good/beneficial for them?
  - If no, why? In which way do you think is not so good for them?
  - Would you like your child learning focus on other skills? Which ones? Why? [*Please, open the question to non-digital skills*]

Focus on school

- Is the school allowing/supporting/integrating digital technologies? Has it change from last year? Which types of devices do they allow in school/in class [*note that school/class is not the same*]?

- How do you feel, what do you think about the school's position on this?

- What do you think should be the 'ideal' school role on digital technologies and digital skills?

Focus on the social order

- How are devices/digital skills important socially in your child's life? Does digital skills have an impact in the way children are included/excluded in the group or an activity. Was it the same as last year?

- Is your child attending informal groups after schools that supports digital skills? Was it already following this group already? E.g. coding sessions [*If not already mentioned*]

  [*Confront this answer with Q4 and Q5 of the pre-questionnaire 'How important are digital technologies for the children, for you and for the family life?' and 'Which aspects would you say that digital technologies bring in your family life?'*]

4. Mediation/rules

[Some of the questions here may overlap with the ones pointing on perceptions]

- What are the few things that you always remind your child to do about digital technologies (if any)? Are they the same as last year?
    - If YES, which one? Why is it important to you? Do your partner share the same views?
    - If NO, which one? why are they different?
- Do your partner share the same views as you? YES, NO, WHY?
- Was it already like this last year? Did any of you change mind or evolve on this subject? If yes, what happened? How did it matters and have you change your mind?

Conversation with the child

In Q12 of the pre-questionnaire, you/your partner told us that you usually talk about X/Y/Z with your child.

- Can you recall the first time you had this kind of conversation with your child?
- How the conversation came up?
- Did you planned it or did you felt the need for it?
- Was your child receptive?

Conversation between the parents

[This information is helpful to understand how mediation strategies are decided and negotiated]

What about you and your partner?

- Do you talk about these issues as well?
- Do you have any other concerns?
- Which are the recurrent themes?
- What do unchain/motivate the conversation? A particular situation? A ruling topic of conversation? A conversation with other people?

[*In case of separated parents, if the theme emerge, it would interesting to know about how do they manage to communicate/decide on digital technology in the life of their child.*]

- Do both parents agree on this? Do you have different point of views on this?

Rules

We remember that you had X/Y/Z rule (or no rules) regarding your child usage of digital technology.

- Is the rule still effective?
- Did you had to change/modify/adapt strategy? And why?
- Did you see a change of interest/device/behavior/friends/social world?

[*Please, repeat the questions for each rule that we tracked down in the first interview, or at least the more important ones*].

Mediation

[Please, start from the Q12 in the pre questionnaire, where there is a map of the activities that have been a topic of conversation between the parents and the child during the last month.]

[Get inspired by the following questions to get deeper in the understanding of parental mediation and its change over time. Please refer and cross-reference the question to the answers provided by the parent in the pre-interview questionnaire]

- For which activity/ies do you have clear rules? Where these rules already in a year ago? Or are they new? Or adapted? Why are these rules necessary?
- We remember you or your partner share X/Y/Z digital activities with your child. Do you still do share them? Do you have any new ones? Why?
- We remember you or your partner did not shared much digital activities with your child. IS it still the case or not? Why?
- In the questionnaire you/your partner say that you chose "free apps only /payable apps only/payable apps along with free apps". What are your views there? Is this choice the same like last year? Did you change your mind?
- In the pre-questionnaire [Q3, Where and with who is the different digital devices of the household used] you/your partner say that you share your "smartphone" with your child. How do you manage? Do you have rules? If yes, which one. If no, why there is any rule? Was it the same last year? Do you negotiate the rules?

Risk and prevention

[If risks prevention/ safety concerns did not emerge till now]: You told us in the first interview that you were worried about X safety concern issues. Now your child has gained one year and can do more things (with digital technology; has gained autonomy, skills increased social circle …), so now, what is your perception? Do you think your child is safer or more at risk today? Or equally safe?

[If the possible effects of the first interview did not emerge till now, here you have a bunch of questions to raise]:

- You, we, remember the first interview (ex: It was a Saturday morning, your husband was there, it was a rainy day, you were planning to go to the cinema in the afternoon….) BUT can you remember what happen when you closed the door? Did you talk about the interview? With your child? Partner? Parents, Siblings? Friends? Class teacher?
- Did the interview gave you the opportunity to reflect about your digital technology family life? Did you realized something thanks to it? Did you change or decided you would change something after it? Yes, what, Why? Did you succeed?
- Did you inform yourself further?
- Did you ask anything to your child? What did they said after our visit?
- Did you change your own way of using digital technology (in general and/or in presence of your child?)

5. Perceptions: the way they see digital technology, the same as before, different?

In the pre-questionnaire [Q5] you/your partner said that digital technologies bring X/Y/Z to your family life.

- (raise for all the items that emerge) In which circumstances is?
- Is there any other thing that you want to comment?

You can use the 'word card game' available on the share drive to help through this part of the interview. The card game provides words only, (like 'babysitter', 'boring', and 'imagination', 'educational', 'addictive') perceptions close to the ones present in the question 5 of the pre-interview questionnaire. If the two parents are presents, please provide one card game for each.

Closing

Provide a brief summary of the change you could monitor over the interview.

- What would be the tips you would give to new parents? (at least 3)

- What would be the tips you wanted to have when you child was 3 years old regarding parenting his/her digital life?

- What are the tips you would like to receive now that your child is XX year old?

Thank the parents for this conclusion and ask if they have any leftover questions they would like to ask.