

Children’s digital friendship practices during the first Covid-19 lockdown

Stine Liv Johansen¹  & Thomas Enemark Lundtofte² 

1. Associate Professor, Department of Communication and Culture – Centre for Children’s Literature and Media, Aarhus University
2. Associate Professor, Department of Media, Design, Learning and Cognition, University of Southern Denmark

Abstract

During the Covid-19 pandemic, digital technologies have come to the forefront of most people’s social, professional, and educational lives, and children have, like everyone else, depended on digital media for remote schooling as well as informal communication with their peers. This article presents results from a qualitative interview study among 20 Danish children, aged 3–12, and their parents during the spring and summer of 2020. As would be expected, age predicted a certain level of proficiency with, and access to, digital media technologies. However, children across the age spectrum of our sample relied on adult facilitation of digital practices in similar ways during a time where these were foregrounded in unforeseen ways. We discuss these findings in relation to a triadic theoretical framework of distributed agency, dynamic affordances, and access-oriented aspects of children’s practices with communication technology.

Keywords

young children, adolescents, digital media, friendship, Covid-19, agency, affordance

Introduction: The role of digital media in friendships

When governments across the world decided to close workplaces, schools, and daycare settings in the spring of 2020 to avoid and delay the spread of Covid-19, children – like everyone else – depended on digital media technologies to remain in touch with the world outside their homes. In this article, we present and discuss the results of a qualitative study among Danish children to reflect on the role of digital media in children's friendship practices. We show how children, across the age span of 3–12 years old, made use of digital tools, and how this use in different ways drew and depended on the support of adults. We use the insights from this study to discuss how to approach the topic of digital media and friendship practices, also beyond pandemics and lockdowns.

Understanding the role of digital media in the way children practise friendships today may well seem like going on a wild goose chase, since it rarely makes sense to distinguish between notions such as “online” and “offline” activities because the two are so entangled. However, studies of friendship circles in what now seems like the early days of social media used the online/offline distinction to understand whether said circles in these two realms were different. It was discovered, via surveys of American high-school students, that most online and offline friendships overlapped, with online communication serving to strengthen relationships established in the offline world (Reich et al., 2012).

Friendships and peer relations are substantial parts of children's identity building and general well-being (cf. Corsaro, 2003). For most children and adolescents, and increasingly with age, digital communication is integral to the practising of friendship (Willett, 2015; boyd, 2014; Ito et al., 2010; Kofoed & Larsen, 2016; Livingstone & Sefton-Green, 2016). There is no doubt that the opportunities of children and young people to create and build relationships have changed due to digital media developments. There are now numerous options when it comes to getting in touch (and keeping in touch) with other people across great physical distances, allowing children and young people to communicate and interact without relying on face-to-face contact (Yau & Reich, 2017). Still, few would have imagined that digital communication would be the only way for children and young people to practise friendships for large parts of 2020 and 2021, due to the Covid-19 crisis. In this article, we discuss the role of digital media in children's friendship practices during this period, as well as how and why the specific circumstances created by the pandemic provide us with new understandings and nuances of children's digital lives.

Parents, teachers, and other stakeholders involved in public debates on children and media often express little appreciation of the value of mediated play and children's engagements in digital communication in general (Johansen, 2018). But during the Covid-19 crisis, digital technologies have come to the forefront of most people's social, professional, and educational lives, and children have, like everyone else, depended on digital media for remote schooling as well as informal communication with friends and extended family. This article presents results from a qualitative interview study among 20 Danish children, aged 3–12, and their parents. The study was carried out in early summer

2020 and examines how digital technologies were foregrounded in new and extensive ways when schools and daycare institutions were closed and when contact with relatives, especially elderly family members, was subjected to restrictions. The study is part of a cross-European research collaboration (KiDiCoTi), initiated by the European Commission, which aims to identify new understandings of risks and opportunities in children's digital media practices after the spread of Covid-19.¹ In this article, we focus on further explorative work done with data from the Danish sample and, particularly, on how and to what extent children could remain in contact with their peers.

To understand children's peer practices today, one must take their digital practices into consideration. Though this was the case before the Covid-19 lockdowns (cf. Livingstone & Sefton-Green, 2016), this has been emphasized in new and distinct ways during the lockdowns. Therefore, this article homes in on how digital technologies have enabled and/or restricted children's relations with peers, classmates, and friends, and how new media practices were established to stay (or become) connected with others. Our empirical data is analyzed using theories of distributed agency and dynamic affordances of communication technology. Consequently, we present an outline of the differences in practices and perceptions among the children in the study in connection with their different opportunities to access media during this period.

General circumstances during the study

Generally, Denmark has been less critically affected by Covid-19 than many other countries in Europe. Denmark did not experience significant premature mortality in 2020 (Islam et al., 2021), and apart from a short period at the beginning of 2021, hospitals have not been critically affected by Covid-19 patients. In contrast to other countries, no general curfews have ever been imposed, and people have been able to move around as they like. Large gatherings have been restricted at different levels throughout the period. As in most European countries, schools and daycare institutions – as well as after-school activities and many workplaces – were shut down from mid-March 2020 due to the rising number of Covid-19 cases. From 16 March until 15 April, daycare centres were closed. However, children whose parents were unable to take care of them, and children of medical doctors and nurses, were offered access to emergency daycare/school. Schools reopened gradually for younger children in mid-April and for older children in mid-May. Students in upper secondary schools and higher education did not return fully until after the summer holiday (for a full timeline of how Covid-19 affected Danish society in general and children's lives in particular, see Johansen & Lundtofte, 2020).

As would be expected, peer relations were practised differently by the children in our sample. The age range of 3–12 years encompasses children in very different positions and with different life experiences. While younger children (aged 3–7) had limited contact with other children and relied on parental supervision and support to overcome this

problem, children aged 8 and up more often made use of established social media practices and networks to stay in touch with schoolmates and friends. These differences were underscored by the differences in children's access to digital communication tools and their ability to use them in meaningful ways to communicate with people outside their households, for instance, their friends from kindergarten. At the same time, it is clear that all children depended on support from adults (in particular parents and teachers) to provide access to relevant communication tools and to organise the use of these in relevant manners. Consequently, the findings we present with this article contribute to our understanding of how children's agency is expressed in media practices. Concomitantly, we discuss how these experiences during the Covid-19 pandemic have affected parents' perceptions of how children's friendships are articulated in and shaped by media technologies, and how parents as well as teachers play an essential role in framing children's friendship practices in general, and their digital practices in particular.

Theoretical foundation:

Access, affordance, and agency in mediated friendships

Studies of how digital media play a role in the formative and developmental aspects of adolescent life show that online peer communication promotes a sense of belonging and self-disclosure, which is strengthened across notions of online and offline realms (Davis, 2012, 2013). In a study of 58 women (aged 18–21), using methods of observation as well as self-reporting, the quality of bonding with known friends was assessed vis-à-vis in-person interaction, video communication, audio communication, and instant messaging. The results revealed that in terms of quality, this was also the order in which personal interaction was rated, with individual preferences leaning towards preferred media without ever superseding in-person interaction (Sherman et al., 2013). In this sense, it is possible to speculate about what exactly is lost when interactions are mediated, and whether and how the mix of in-person and mediated interactions should be reflected upon qualitatively. Recent cohort studies of American high-school students (n=8.4 million) claim that there is an overall correlation between low in-person social interaction and high social media use; but at the individual level, in-person interaction and social media use are positively correlated (Twenge et al., 2019). However, inferences about the correlations between the use of social media (and smartphones) and the self-reported mental well-being of American adolescents using similar cohort studies have recently been problematised emphatically (Orben, 2020).

Communicating via digital media demands both access and the ability to understand, assess, and operationalise media, not to be confused with debates regarding media competences and information literacy discourse (e.g., Drotner et al., 2017). Little research has been conducted regarding the role of digital media in the peer friendships of young children. However, Rosie Flewitt and Alison Clark (2020) have recently suggested an

updated understanding of the home literacy environment as a digitally networked space with porous boundaries, offering diverse modes of negotiating affective relationships and expressing meaning. By observing a one-year-old girl and a two-year-old boy in England, Flewitt and Clark demonstrate the acute entanglement of digital media in everyday practices, underlining that our understanding of their role needs to reflect this entanglement. As such, digital media have become a fact of life for children of all ages, leading to a need for greater understanding of children's agency at all ages and in different aspects of daily life, such as learning in and outside of schools, family relations, and not least peer relations in a broad sense, and friendship practices in particular.

Obviously, we should not imagine that teenagers and young children use digital media in their friendships in the same way. Nonetheless, one interview study of adolescents with physical disabilities and complex communication needs suggests that augmentative and alternative communication can improve access to digital communication, which is perceived to "increase opportunities for self-determination and self-representation whilst enriching friendships" (Hynan et al., 2014). In conclusion, we have identified a remarkable gap in the research regarding the role of digital media in the assertion and development of young children's peer relationships, and it would be especially helpful to understand how children are provided with access and support to explore this highly entangled aspect of their everyday lives. Moreover, we need to further our understanding of how (young) children perceive the nature and quality of interacting with friends using various forms of digital media.

The role of digital media in childhood and adolescence has been explored by, for instance, boyd (2014), Ito et al. (2010), and Livingstone and Sefton-Green (2016), who all point to the ways in which digital media allow children and young people to have social interactions and relations across different settings of their everyday lives, and not least away from adults' gaze and supervision. Willett (2015) shows how digital gaming platforms function as sites for children to meet new friends and engage with those they already have. Kofoed and Larsen (2016) have researched young people's use of Snapchat and describe how the platform with its ephemeral exchange of everyday snapshots allows for playful and oftentimes transgressive practices that have a strengthening effect on the peer relations of the users. As such, previous research has shown how digital media are, in different ways, entangled with affective practices in children and young people's lives, and how friendship practices are enabled and structured by media platforms.

Concepts of distributed agency and dynamic affordances

Due to the entangled nature of digital technologies, human bodies, and many other factors in children's everyday lives, we adopt a concept of distributed agency in the sense that outcomes (or meaning) result from the actions of multiple actors (cf. Rammert, 2015). Spyrou (2018) understands agency in connection to a relational dynamic and calls for attention towards the way in which children's actions are inscribed in social, cultural,

economic, and all other kinds of constraints (*ibid.*, p. 8). Among these constraints, we find the affordances of the technologies, which children use and have access to, and the ways in which children are allowed and/or restricted access to these.

All digital technologies have affordances, which is a concept used in communication and design studies to signify ways in which said technologies/designs become meaningful to specific (human) actors under specific circumstances. The concept is useful for us, because it deals with the dichotomy in semiotics between (cultural) conventions about what is meant by a sign and individual interpretation, based on personal experiences, as a source of meaning (cf. Norman, 1999). The concept of affordance lends itself to the idea that designs are not understood similarly – or perhaps equally – by all users. For instance, people who are not part of the cultural group which understands the semiotics alluring to the function of “scrolling” will perhaps not understand the visual cues signifying this affordance of being able to read lengthy texts. Norman (1999) speaks to the perception of affordances as well, aiming to direct designers' attention to caring about whether users will understand their intentions. More recently, Adrienne Shaw has synthesized the concept of affordance with Stuart Hall's canonised model of encoding and decoding (Hall, 1980), situating the discussion within communication studies. Shaw argues that ideas of perceptible, hidden, and false affordances can be understood in relation to Hall's concepts of dominant/hegemonic, negotiated, and oppositional reading positions (Shaw, 2017). Shaw's main points remind us that the concept of agency is integral to the concept of affordance, which is signified by the connotations of human intention (or reading positions) in Hall's articulations (i.e., domination, negotiation, and opposition). Using the concept of “imagined affordances” (Nagy & Neff, 2015), Shaw demonstrates that affordances, as situated meaning-making, are “negotiated in particular moments” (2017: 594). In conclusion, concepts of affordance and agency are hard to separate when analysing the situated use of digital technologies, and we are reminded that the affordances of an object depend on the relationship between said object and a (human) actor. What we wish to discuss, using this premise, is how we can observe the dynamic nature of affordances in connection to distributed agency.

Taking this point of departure in a dynamic understanding of affordances of digital (media) technologies, we acknowledge and exemplify that all media users are not created equal. This point is particularly important to bear in mind, as children are sometimes wrongfully portrayed as homogenous in their use of media and otherwise (James et al., 2017). Consequently, children in different age groups are assigned different access to media technologies, and they therefore have different opportunities to practise friendships and keep in touch with their peers. In our analysis, we discuss this in relation to the theoretical concepts mentioned above.

Children's peer practices

Building on a general understanding of children as social beings who are prone to establish and maintain (playful) relationships with peers, we draw on a theoretical framework inspired by childhood (and media) studies. A foundational understanding of children's friendship practices is found in the works of William A. Corsaro, primarily his fieldwork in preschools. Since the 1980s, Corsaro has been a leading voice in emphasising the meaning and importance of children's peer cultures as fundamental to their lives, and he has shown that these cultures are visible in children's everyday practices, especially in nurseries, kindergartens, preschools, and schools. In the book *We're Friends, Right?: Inside Kids' Culture*, Corsaro examines children's peer culture, understood as "local peer cultures that are produced and shared primarily through face-to-face interaction" (2003: 1). Corsaro emphasises the uniqueness of children's peer culture and has played a particularly important role in recognising the specificity of young children's self-initiated, social, and cultural practices. Later research in childhood studies and children's sociology has warned us about over-essentialising children's peer cultures and reminds us to think about how these peer cultures are encapsulated in larger societal structures and institutions (Gulløv, 1999) and how children might be living under different circumstances than adults, while not being fundamentally different from adults (Gubar, 2013).

In this study, we focus on children of different ages who are living under specific (and different) circumstances, and how their everyday culture was influenced by the pandemic and lockdowns. Our study concerns children in Denmark, and the restrictions they were experiencing were not the same as the restrictions facing children in other countries. Similarly, the particular circumstances, age, and family situation of each child should be taken into consideration. While the trans-European study KiDiCoTi, mentioned above, had a focus on children within the age group 6–12, the Danish sample includes children down to the age of 3, since we were eager to understand the perspectives of younger children as well, and to describe the specific circumstances of very young children who had not yet started school and who were therefore not subject to any formal learning goals or initiatives. Including this age group provided us with specific methodological challenges, as we present in more detail below, but it also allowed us to study the differences and similarities among children across a wider age span.

Video interviews, drawings, and questionnaires

This article is based on data from 20 video interviews with children and their parents. Due to the pandemic restrictions, which we were also subject to as university employees, we had to use video conference software to carry out the interviews. The interviews adhered to a structured interview guide and five research questions, which were shared across the KiDiCoTi project partners for the sake of transnational meta-analysis and comparison. The study had an overall focus on how the first lockdowns in spring 2020 affected children

and their families, with a specific focus on their everyday digital practices. Furthermore, the study focused on the future impact of this specific period and on recommendations for public authorities, policy makers, and other relevant parties. As mentioned above, our data revealed the topic of friendship practices that cut across the interviews, even though it was not specified in the research questions and interview guide. The analysis in this article specifically focuses on these aspects (a general overview of the interviews can be found in Johansen & Lundtofte, 2020).

The children in the study were evenly distributed in terms of age and gender (see table 1). In most cases, there was only one child in the interview, although in one case, a brother and sister were interviewed together (aged 7 and 4, respectively), with their father

Age	Gender	Mother in the family	Father in the family	Siblings to the child	Parent(s) visibly present during interview
3	M	X	X	0	X
3	F	X	X	1	X
4	F	X	X	2	X
4	F	X	X	1	X
5	M	X	X	2	X
6	F	X	X	1	X
6	M	X		0	X
7	F	X	X	0	
7	M	X	X	2	X
7	F	X	X	0	
8	M	X	X	2	X
8	F	X	X	1	X
9	F	X	X	3	
9	M	X	X	1	
9	M	X		0	X
10	F	X	X	3	
11	F	X	X	3	
11	M	X	X	2	
12	M	X		0	
12	F	X	X	1	

Table 1. Primary informants in terms of age, gender (female or male), family configuration in terms of mother or father in the home (x means yes), number of siblings to the primary informant, and whether parent(s) were visibly present during the interview with the child (x means yes). None of our informants had parents of the same gender.

also present. Each interview started with a series of questions directed towards the parent (in a few cases, two parents), related to the general situation of the family during the lockdown, as well as the use of digital technologies before, during, and after this period. The second part of the interview focused on the child's own perspectives. We let the children themselves decide if they wanted their parents to be present or not. For the youngest children in the sample, parents were mostly present and played an active role as mediator of the child's responses. Some of the older children wanted their parents present, and some did not. Due to the video interview setup, this sometimes meant that parents were present in the background, sometimes they left the room – or the child left the room and “invited” the interviewer along.

In this particular setting of using video conference software, the dialogical practice of conversing takes place via a media technology, which, in turn, affects the outcome. This is, of course, the case in all types of mediated conversations or interviews. Methods of conducting online, video-supported research have been known and used previously, but since the spring of 2020, a growing body of qualitative studies have had to reflect on the implications of not being able to meet interviewees face-to-face (see Watson & Lupton, 2022, for an overview). However, the precedence of interviewing (young) children using this technology is scarce and had not been treated in academic literature, leaving us with the task of translating familiar interview techniques into this new framework. In every case, the configuration of actors, the equipment, the quality of the internet connection, and the rooms in which the interviews took place affected the outcome to some extent. For example, when a three-year-old boy was handed the smartphone and started to move away from his mother, thereby “taking the interview with him”; or when an interview with an eleven-year-old boy turned to the topic of football, inspired by posters on the walls of his room. These examples display how the technological mediation aspects facilitated interview situations with aspects familiar to regular face-to-face situations in a media ethnographic field study. However, they also exemplify how the more-or-less intentional placement of cameras curate the image of the private space conveyed to us as researchers.

In addition to the video interviews, we collected background information about the families in relation to their socioeconomic status as well as their use of and access to digital media technologies and platforms. To support reflexivity (Christensen & James, 2017, p. 3–7), the children were also asked to provide background information using a questionnaire that resembled an activity book with different tasks that could be solved using drawings as well as written text. Some of the older children found it a bit childish, but their answers were nonetheless valuable to structure and help the interview process along. This also relates to some of the methodological limitations of video interviewing, as informants and their parents were often already seated and ready to be interviewed when the connection was made. Being experienced researchers and interviewers of children, we usually rely on certain icebreaking techniques upon arrival to the interview location

(which is often at the child's home), but these were obviously hindered to some effect. Consequently, the pre-interview material helped us scaffold ways of approaching the informants across the age spectrum of our sample, as well as their parents.

The interviews took place in May and June 2020, when children had been back at school and daycare for a short while, but when many of the interviewed parents were still working from home. Although our interviews were carried out not long after the initial lockdown, some children – especially the youngest – found it hard to remember what lockdown felt like and were thus already accustomed to the post-lockdown situation. When young children found it hard to remember the lockdown, the interview relied heavily on the parents and their recollections and reflections, while the interview with the child focused more broadly on their use of digital media in general. In some families, life had returned more or less to normal at the time of the interview, while in others, parents were still working from home. Although most children in our sample were back at school or daycare, they all experienced some restrictions, such as physical boundaries at the playground or being divided into exclusive groups, which meant that they could not play with friends from other classes or groups during their breaks. Nonetheless, the findings we present in the following focus on the time when the children were in lockdown.

We relied on a semi-structured, child-oriented approach in our interviews (Flewitt, 2013; Prior, 2016), which took place using Zoom, Microsoft Teams, Google Meet, Skype, or FaceTime. Since we had access to all these platforms, we let the parents decide which service they preferred. During the spring of 2020, many people became rapidly acquainted with online meetings, and this study therefore benefited from some of these recently acquired digital skills among parents who were previously less familiar with them. The interviews were recorded in the form of digital video files and transcribed for thematic analysis (Peterson, 2017).

As mentioned, we included younger children in the sample and also performed an exploratory coding of the data to find aspects related to friendship practices, since this was a category that became apparent in many of the responses from both children and parents. Aspects of friendship in the data material were organized according to the following categories: physical restrictions/absence from friends, digital communication with friends, and adults' support/restrictions. Within each category, we have seen aspects relating to children's versus adults' access and agency, different media technologies with different affordances, and changing practices during and after lockdown, which we exemplify in the following. It is obvious that children's age will have a strong influence on the practices of the child, but through the thematic analysis, we have become able to see how children of different ages can – in similar ways – be subject to and dependent on adults' framing of their friendship practices.

Analysis: Agency, access, and affordance in digital friendship practices

The following analysis presents findings and examples from the prevalent themes that we discovered through our thematic analysis and relates them to our triadic framework of distributed agency, dynamic affordances, and access. We present our findings according to the three themes introduced above, and – as is also reflected in our discussion – a central point of our analysis is that the value of adult facilitation and provision of access cuts across the age groups of our sample and leaves us with interesting perspectives to consider. Also, the general foregrounding of digital technologies during this particular time has inspired parents to reflect on the nature of this aspect of their children's social lives. Lastly, as a highly IT-saturated country, Denmark presents us with a case study of how in-place digital technologies aided older children in remaining in touch with their friends from school, while it is debatable whether younger children could have benefitted from more access and adult-facilitated connectivity. Our findings indicate this might be the case with children who had recently started primary school.

Physical restrictions and absence

In many ways, children and adults were subject to the same set of government imposed restrictions during the lockdown period, which closed daycare institutions, schools, and many workplaces. At the same time, school children and adults were expected to continue their education and their work in whichever possible way, and oftentimes with the use of digital communication tools. As mentioned above, we registered a difference in children's friendship practices attributed to age, as well as a difference between the practices of the youngest children (those who attended kindergarten) and the group in the middle (6–7-year-olds attending the first two grades of primary school).

Generally, the youngest children in our sample had very little contact with their friends and were not being encouraged or supported in keeping in touch via digital technologies. At the time of the interviews, although children had returned to daycare and schools, there were still physical restrictions keeping them from being with children from other play groups and classes. It should be acknowledged that even very young children form important relationships with their peers. In Denmark, most children aged 3 or more attend kindergarten and form friendships with other children there. When Covid-19 restrictions kept them from spending time with their friends, they experienced unease and sadness. Three-year-old Sally and her mum talked about this as follows:

Mum: There was one person that you really missed..?

Sally: Mia.

Mum: Yes, you missed Mia a lot.

Interviewer: But then you could ride your bikes together and stuff?

Mum: You could ride your bikes, but you couldn't hug like you were used to, it wasn't allowed.

Interviewer: No.

Mum: And that felt strange. But there is actually still someone you miss playing with, right? In kindergarten...?

Sally: ...

Mum: You can't play with all your friends there yet, you know. Do you remember who it is?

Sally: Felix!

Mum: Yes, you can't play with Felix right now, he's in another group. And you have known him since you were in nursery together, right? So it feels strange.

Sally: But I actually dreamed...!

Interviewer: What did you dream about?

Sally: About the nursery.

Interviewer: Did you dream about the nursery?

Sally: ...

Mum: Was it nice?

Sally: ...

Mum: Felix was very sad one morning, right, because you couldn't hug each other, and then he started crying. And it was difficult to comfort him when we weren't allowed to touch him. It felt awkward [...]

Some parents of the youngest children reported using FaceTime and similar technologies to communicate with grandparents and other relatives. But generally, the youngest (aged 3–5) children used digital technologies primarily for receptive purposes, such as watching television or videos on YouTube, and they had very little contact with peers. The oldest children in our sample were not only afforded greater access to digital technologies in nuanced ways, but often also faced fewer restrictions and were sometimes able to hang out with other children in small groups and/or outdoors. This practice of sticking to direct contact with a small group of people was often described as “being in the same bubble”. In these cases, the use of smartphones to make appointments and the ability to meet a few people on their own provided them with agency in terms of seeing friends face-to-face. For example, 12-year-old Alan, who is a skater, was allowed to meet with his friends to skate, as well as being allowed to play computer games in small groups at home.

Digital communication with friends

Even though Alan was allowed to meet with friends and skate, he and his friends saw the benefits of using digital communication tools for informal communication, for instance, when they hung out after online classes:

Alan: Well, me and my friend, we've had, like, a kinda tradition. We, ehm, every day after the meeting, the teacher leaves the room, and all the others also leave the call. And then we just stay and chat, while we do our homework. It's really cosy.

This example reveals another aspect of how technologies initially used for specific school purposes were used in a dynamic way owing to their affordances (the opportunity to stay in a virtual room after everyone else has left), forming a space in which the two boys could turn homework time into a cosy social event which they both enjoyed. They even

made a habit or “kinda tradition” of it and used it as a reference point in an otherwise unstable period. The example underlines a recurring point among the older children in our sample. They were generally happy to use the communication channels provided by their teachers and schools to remain in touch with peers. In this sense, the virtual classroom afforded some of the same things as a regular, physical classroom in the sense that it could serve as a space for hanging out in addition to getting homework done. This was somewhat surprising, as we expected the older children to prefer familiar commercial platforms such as Snapchat or Discord over adult- or school-facilitated realms.

For children aged 6–7, digital media were in some cases used for interactive and communicative purposes. These children were, at the time of the interview, either in grade zero (which is the first grade of the Danish primary school, with children starting school in August of the year they turn 6) or first grade. For these children, the lockdown period has covered a significant part of their time in school, and their peer relationships may be less close-knit than those of older children. This means that they were very dependent on the organisation of peer-to-peer contact, physically or virtually, by adults (parents or teachers). Seven-year-old Naya likes to play Roblox with her friends and has convinced her parents that she needs a Skype account to chat and interact with them about this computer game. She plays Roblox with a handful of her friends from school and with her cousin, who she often used to visit for sleepovers and other activities. Now she cannot meet him in person, but she thinks that Skype can make up for that. She really hopes that he will be able to visit her soon. Naya's mother used to be quite reluctant about the use of digital media in her child's life, but she has changed her mind because digital media are now so widespread.

Mum: Well, I think that I used to be a little retro and thought: “No, please don't just sit there and look at a screen” and stuff, but now I see that it can be used differently, and during the lockdown she has really benefited from it. You could hear her giggle, you know! So, we actually also made this Skype account in her name, because she used to borrow my phone to facetime with a friend; they sort of had a playdate, where they ran around in their rooms and showed each other stuff. It was really cosy, but it was a bit inconvenient that she needed my phone to do this. So, we decided to make a Skype account that she could access on the tablet, which she also uses for gaming. Then they dial each other up, and they can accompany each other into those worlds...

The initiative to create Skype accounts came from the mother of one of Naya's friends. Due to technical issues, having a separate account for communicating made it possible for different groups of children to play Roblox together. This convinced Naya's mother to change her mind about Naya's use of digital media. The decision made by Naya's mother reflects a general tendency among the parents in our sample to lift restrictions and provide digital access, when they believed it to be important to their child's social opportunities. The example also reflects the analytical theme related to affordances of different platforms, which we return to later.

Adults' support and restrictions

Naturally, children who had already established digital communication practices before the lockdown were able to continue this way of communicating. Private and commercially funded research claims that children in Denmark are generally gifted their first smartphone when they are about eight or nine years old, which resonates with this study. Also, the older children in the study had wider and less restricted access to gaming consoles and personal computers. Unsurprisingly, they have gained and developed greater agency when it comes to using digital media to stay in touch with their friends. Still, they depended on adults – teachers in particular – enabling virtual spaces in which they could just hang out and “be” with their friends. To provide the necessary scaffolding for home-schooling, some teachers of the older children in our sample had created online spaces for hanging out. Alma, aged nine, explained how she felt about this during the lockdown:

Alma: Well, I missed my friends and I wanted to play with them, because it was a bit boring at home. And so, I looked forward to going back to school.

Interviewer: Yes. Why was it boring at home, do you think?

Alma: I just think it was because I didn't have anyone to play with.

Interviewer: Ok. Could you see them in different ways, now that you couldn't play with them?

Alma: Well, yes, we had some groups and then we could chat with each other.

Interviewer: A group?

Alma: Yes.

Interviewer: Can you explain to me how that works?

Alma: Well, my teacher had made these links for some groups, and I was like, I was in a girls' group. And then I could click on the link and then we could talk about stuff.

Interviewer: Okay. And a girls' group, you say. Do you usually play with the other girls? Is that why you are in the same group?

Alma: Uhm, yes, I think so. I play with Sofie the most.

Interviewer: Oh, okay. So, she was in your group?

Alma: Yes.

Interviewer: Right, that was lucky.

Alma: Mmm.

Interviewer: But it was your teacher who had decided who should be in each group?

Alma: Yes.

Interviewer: And how many of you were there in that group?

Alma: I think there were about five of us.

In this example, Alma chose to talk about the teacher-facilitated groups when asked about her source of digital interaction with friends. This speaks to the importance of facilitated social arenas that create a certain sense of formality, even though friendship practices are often somewhat informal in nature. This finding also indicates that perceptions of the modern child as a tech-savvy and self-reliant user of digital technologies do not necessarily apply to their ability to facilitate casual encounters. Going to school is a

social arena which was kept in place to some extent – at least for the oldest children in our sample – and it provides a framework of common reference which affords friendship practices. Consequently, we can think of this as a case of distributed agency in the sense that the adult facilitators were important for digital communication practices, due to their contributions to structure and routine. In this sense, teachers also played an important part in providing access to the meaningful use of digital technologies.

Discussion and final remarks

As the examples presented above illustrate, children's friendship practices have depended on digital technologies and on adult-facilitated framing of their use during lockdown. Drawing on a theoretical point of departure related to the interplay between access, affordance, and (distributed) agency, we have seen how children in different age groups and living under different life circumstances (some of them attend primary school, while others are not yet in school) have encountered different opportunities to engage playfully and socially with their peers. Our study shows that access to media and communication tools with specific affordances does not necessarily mean that these tools can be used for relevant purposes. This study of children in different age groups during a period when schools and kindergartens as formal settings for children's friendship practices were locked down reveals that children have different agencies when it comes to digital communication, and how they depend on adult facilitation of this communication. Our study challenges the idea that children are "digital natives" (Prensky, 2001) and shows that media affordances are dynamic and attain meaning through practices which rely on the distribution of agency (Shaw, 2017; Spyrou, 2018). Although there are obvious differences between children in different age groups, we also see how children across the age range of our sample benefitted from adult facilitation of digital spaces in which they could meet and hang out with their friends. If adults do not understand the importance of these informal interactions, as was initially the case with Naya's parents, they would not have had the opportunity to keep in touch with classmates and more peripheral contacts. Naya's parents had to overcome their reluctance towards specific technologies and let her have a Skype account. The unusual circumstances of the lockdown caused them to reconsider their resistance towards this mode of communication, which meant that Skype became an accessible tool in Naya's social life.

Most children in our sample, across the age range, reported that they missed interacting with other children, and for some of them, the continuous restrictions (physical distance, avoiding hugs, etc.) made them feel a sense of loss. The long-term effects of the lockdowns on children's social lives, their play and peer cultures, and their digital lives cannot yet be grasped – definitely not at the time of the interviews. However, it was clear that especially the children who were in the first years of school (6–9-year-olds) had experienced a period of hard restrictions on their social lives, which they had only little oppor-

tunity to improve upon. Although most of them had access to digital communication tools, they did not have the necessary skills or knowledge to use these tools in a relevant manner to overcome or ease their temporary loss. The online teaching they were subject to was quite limited as well, and there were only few examples of teachers or after-school pedagogues who had reached out to them and made attempts to facilitate social interaction. The youngest children in the sample felt the physical loss of their friends from daycare as well and were still, at the time of the interviews, subject to some restrictions, but they might at the same time have benefited from the closer contact they had with their parents. At least this is what some parents told us, despite the stress many families felt when juggling remote work and children of different ages and with different needs. The oldest children in the sample had wider opportunities to engage with their friends, both physically and using digital media through formal frameworks in relation to school, but they still relied on access to these frameworks and some facilitation from adults.

For all the children in our sample, access to digital technologies depended in various ways on adult scaffolding of digital social arenas as well as basic permission to use specific digital communication technologies – for the youngest children, quite literally: They needed someone to dial up grandma or set up a digital playdate with a peer. For the children in the middle of the sample, access to digital technologies depended on parents and teachers understanding and accepting their need to hang out, often using different communication tools. The oldest children were able to turn formal online school contexts into less formal encounters with friends in ways that were meaningful to them and perhaps reminded them of normal everyday culture. Consequently, it is evidently not sufficient to have plenty of access to digital communication technologies. By allocating agency, adults can co-create structures within which children experience affordances that foster meaningful experiences of hanging out with their peers.

A pandemic is obviously an unusual situation which requires extraordinary measures at all levels of society, including schools, daycare institutions, and families. The unusual nature of this situation was felt by everyone, so it is meaningful to think about how it has affected our understanding of digital technologies vis-à-vis our social lives in general. Mascheroni and Siibak find, similar to the findings of our study, that although children might not have experienced direct negative effects of the lockdown, it has made them more aware and appreciative of physical interactions with their friends: “For scholars studying a peer group’s sociability online and offline, it comes as no surprise that children’s experiences during the pandemic have revealed a renewed appreciation for face-to-face interactions, which cannot be fully replaced by mediated proximity” (2021, p. 124). In this study, we have added new perspectives – including children’s own perspectives – to an important aspect of their lives and have shown how concepts of access, affordance, and agency can be used to explain the foundation of children’s friendship practices in a period of physical distance and lockdowns. Our findings indicate that we need more knowledge about whether and how young children could benefit from adult-facilitated

digital access to peers – especially during times of isolation. Furthermore, considering how social network sites are increasingly co-constructive of social reality, including friendship practices, children and their parents must stay mindful of the ways in which these “algorithmic media landscape[s] [...] shape our social values” (Bucher, 2018, p. 8). Consequently, we are reminded that children's access to digital technologies, at all ages, gives them agency in some respects, but when adults understand the entangled nature of digital technologies in everyday relational practices, they can help create valuable affordances for children via distributed agency, and thereby also create awareness about algorithmic effects on sociality.

Acknowledgements

The data collection for this research has been funded by The VELUX Foundation, and is part of the project *Kids' Digital Lives during Corona Times* with the Joint Research Centre under the European Commission.

Notes

1 <https://ec.europa.eu/jrc/en/science-update/kidicoti-kids-digital-lives-covid-19-times>

References

- boyd, d. (2014). *It's complicated: The social lives of networked teens*. Yale University Press.
- Bucher, T. (2018). *IF... THEN: Algorithmic power and politics*. Oxford University Press.
- Christensen, P. M., & James, A. (2017). *Research with children: Perspectives and practices* (3rd. ed.). Routledge.
- Corsaro, W. A. (2003). *We're friends, right?: Inside kids' culture*. Joseph Henry Press.
- Davis, K. (2012). Friendship 2.0: Adolescents' experiences of belonging and self-disclosure online. *Journal of adolescence*, 35(6), 1527–1536. <https://doi.org/10.1016/j.adolescence.2012.02.013>
- Davis, K. (2013). Young people's digital lives: The impact of interpersonal relationships and digital media use on adolescents' sense of identity. *Computers in human behavior*, 29(6), 2281–2293. <https://doi.org/10.1016/j.chb.2013.05.022>
- Drotner, K., Frau-Meigs, D., Kotilainen, S., & Uusitalo, N. (2017). The double bind of media and information literacy: a critical view on public policy discourses about MIL. In D. Frau-Meigs, I. Velez, & J. F. Michel (Eds.), *Public policies in media and information literacy in Europe: Cross-country comparisons* (pp. 269–283). Routledge. <https://doi.org/10.4324/9781315628851-9>
- Flewitt, R. (2013). Interviews. In A. Clark, R. Flewitt, M. Hammersley, & M. Robb (Eds.), *Understanding research with children and young people* (pp. 136–53). Sage.
- Flewitt, R., & Clark, A. (2020). Porous boundaries: Reconceptualising the home literacy environment as digitally networked space for 0–3 year olds. *Journal of Early Childhood Literacy*, 20(3), 447–471.
- Gubar, M. (2013). Risky business: Talking about children in children's literature criticism. *Children's Literature Association Quarterly*, 38(4), 450–457.

- Gulløv, E. (1999). *Betydningsdannelse blandt børn* (1. udg.). Gyldendal
- Hall, S. (1980). Encoding/decoding. In S. Hall, D. Hobson, A. Lowe, & P. Willis (Eds.). *Culture, media, language. Working papers in cultural studies, 1972-79* (pp. 128–138). Routledge.
<https://doi.org/10.4324/9780203381182>
- Hynan, A., Murray, J., & Goldbart, J. (2014). 'Happy and excited': Perceptions of using digital technology and social media by young people who use augmentative and alternative communication. *Child Language Teaching and Therapy*, 30(2), 175–186.
- Islam, N., Jdanov, D. A., Shkolnikov, V. M., Khunti, K., Kawachi, I., White, M., Lewington, S., & Lacey, B. (2021). Effects of Covid-19 pandemic on life expectancy and premature mortality in 2020: Time series analysis in 37 countries. *BMJ*, 375, e066768. <https://doi.org/10.1136/bmj-2021-066768>
- Ito, M., Baumer, S., Bittanti, M., boyd, d., Cody, R., Herr, B. & Yardi, S. (2010). *Hanging out, messing around, geeking out: Living and learning with new media*. MIT Press.
- James, C., Davis, K., Charmaraman, L., Konrath, S., Slovak, P., Weinstein, E., & Yarosh, L. (2017). Digital Life and Youth Well-being, Social Connectedness, Empathy, and Narcissism. *Pediatrics (Evanston)*, 140(Suppl 2), S71-S75.
- Johansen, S. L. (2018). Everyday media play: Children's playful media practices. *Conjunctions: Transdisciplinary Journal of Cultural Participation*, 4(1), 1–10. <https://doi.org/10.7146/tjcp.v4i1.103493>
- Johansen, S.L. & Lundtofte, T.E. (2020). *KIDS DIGITAL LIVES IN COVID-19 TIMES - DIGITAL PRACTICES, SAFETY AND WELL-BEING OF THE 6-12 YEARS OLD A qualitative study - National report – DENMARK*. Working Paper. <https://projekter.au.dk/digitalt-boerneliv-under-corona/>
- Kofoed, J., & Larsen, M. C. (2016). A snap of intimacy: Photo-sharing practices among young people on social media. *First Monday*, 21(11). <https://doi.org/10.5210/fm.v21i11.6905>
- Livingstone, S. M., & Sefton-Green, J. (2016). *The class: Living and learning in the digital age*. New York University Press.
- Mascheroni, G., Siibak, A. (2021). *Datafied Childhoods*. New York, United States of America: Peter Lang Verlag.
- Nagy, P., & Neff, G. (2015). Imagined affordance: Reconstructing a keyword for communication theory. *Social Media + Society*. <https://doi.org/10.1177/2056305115603385>
- Norman, D. A. (1999). Affordance, conventions, and design. *Interactions*, 6(3), 38–43.
<https://doi.org/10.1145/301153.301168>
- Orben, A. (2020). Teenagers, screens and social media: A narrative review of reviews and key studies. *Social Psychiatry and Psychiatric Epidemiology*, 55(4), 407–414. <https://doi.org/10.1007/s00127-019-01825-4>
- Peterson, B. L. (2017). Thematic analysis/interpretive thematic analysis. In *The international encyclopedia of communication research methods* (pp. 1–9). John Wiley & Sons. <https://doi.org/10.1002/9781118901731>
- Prensky, M. (2001) Digital natives, digital immigrants. *On the Horizon*, 9(5), 1–6.
<https://doi.org/10.1108/10748120110424816>
- Prior, J. (2016). The use of semi-structured interviews with young children. In J. Prior, & J. V. Herwegen (Eds.), *Practical research with children* (pp. 109–126). Routledge.
<https://doi.org/10.4324/9781315676067>
- Rammert, W. (2015). Where the action is: Distributed agency between humans, machines, and programs. In U. Seifert, J. H. Kim, & A. Moore (Eds.), (1st ed.) (pp. 62–91). transcript Verlag.
<https://doi.org/10.14361/9783839408421-004>
- Reich, S. M., Subrahmanyam, K., & Espinoza, G. (2012). Friending, IMing, and hanging out face-to-face: Overlap in adolescents' online and offline social networks. *Developmental Psychology*, 48(2), 356–368.
<https://doi.org/10.1037/a0026980>

- Shaw, A. (2017). Encoding and decoding affordances: Stuart Hall and interactive media technologies. *Media, Culture & Society*, 39(4), 592–602. <https://doi.org/10.1177/0163443717692741>
- Sherman, L. E., Michikyan, M., & Greenfield, P. M. (2013). The effects of text, audio, video, and in-person communication on bonding between friends. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 7(2), Article 3. <https://doi.org/10.5817/CP2013-2-3>
- Spyrou, S. (2018). *Disclosing childhoods: Research and knowledge production for critical childhood studies*. Palgrave.
- Twenge, J. M., Spitzberg, B. H., & Campbell, W. K. (2019). Less in-person social interaction with peers among U.S. adolescents in the 21st century and links to loneliness. *Journal of Social and Personal Relationships*, 36(6), 1892–1913. <https://doi.org/10.1177/0265407519836170>
- Watson, A., & Lupton, D. (2022). Remote fieldwork in homes during the COVID-19 pandemic: Video-call ethnography and map drawing methods. *International Journal of Qualitative Methods*, 21. <https://doi.org/10.1177/16094069221078376>
- Willett, R. (2015). 'Friending someone means just adding them to your friends list, not much else': Children's casual practices in virtual world games. *Convergence*, 23(3), 325–340. <https://doi.org/10.1177/1354856515599513>
- Yau, J. C., & Reich, S. M. (2017). Are the qualities of adolescents' offline friendships present in digital interactions? *Adolescent Research Review*, 3(3), 339–355. <https://doi.org/10.1007/s40894-017-0059-y>