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Investigating the digital media engagements of very young children at home: Reflecting on methodology and ethics

Abstract: In the media and communications field, research investigating the digital media engagements of very young children at home has largely been restricted to survey methods relying on parental self-reports. Recognizing that qualitative approaches can provide insights in families' practices, values, and attitudes, we argue for the fruitfulness of an ethnographic perspective, drawing on three cases from the project "A Day in the Digital Lives of children 0–3;" two in Sweden and one in England. Using the concept of methodological responsibility, we argue that methodology and ethics are intrinsically entwined. We offer reflections on dilemmas and challenges involved in our participatory work with children under three and their families, bringing attention to such issues as ensuring initial and ongoing consent, using a video camera in the home and data sharing and dissemination. Building trust in such sensitive work is a complex process but the rewards are considerable.

Keywords: 0–3 years, ethics, digital media, methodology, video, young children

1 Introduction

Studying very young children's media engagement in the home is a timely, yet challenging opportunity (Troseth, Russo, and Strouse, 2016). It is timely in that very young children (under three years old) in Europe are gaining access to, and using, digital media through smart TVs, tablets, smartphones, electronic toys, etc. at an unparalleled pace (Chaudron, Di Gioia, and Gemo, 2018). In their annual report on the state of the world's children, UNICEF, (2017, p. 1) declared:

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"Technology … is changing childhood" with the qualification that access is highly differentiated according to location, class, gender, generation, age, and other factors. Subsequent reviews have found that while the use of digital media by children of school age is developing, empirical research on younger children (ages 0–3) in their homes remains limited (Kumpulainen and Gillen, 2020). Even where parents are particularly inclined to limit very young children's direct access to digital technologies, some of the environments they spend time in will be permeated by digital media, and young children have their own "digital footprints" (Marsh, 2020, p. 19).

As Livingstone, Lim, Nandi, and Pham (2020) argue, two essentially different strands of research endeavor are required to understand very young children's engagements with digital technologies. One strand is the continuation and improvement of government statistical collection of data on family use of media technologies (e. g., Ofcom, 2020; Statens Medieråd, 2019). This relates strongly to a tradition of media and communication scholarship which, while often achieving depth and precision in some issues, is nonetheless largely reliant on the self-reporting of parents (Vittrup, Snider, Rose, and Rippy, 2016). The other strand of work required to achieve a more holistic approach is the gathering and interpretation of qualitative data to investigate "everyday domestic meanings, values and practices" (Livingstone et al., 2020, p. 88), an aim best approached through ethnographic approaches. It is this second strand of work that this paper contributes to. We reflect on recent experiences with a cross-European project, "A day in the digital lives of children aged 0–3", drawing on detailed discussions of our experiences with three cases, two in Sweden and one in the UK. We embrace key dimensions in respected existing guidelines such as the UNICEF Ethical Research Involving Children (ERIC) compendium (Graham, Powell, Taylor, Anderson, and Fitzgerald, 2013). This advocates attention to four dimensions: harms and benefits; informed consent; privacy and confidentiality; and payment and compensation in order to honor and protect the human dignity of children, their rights and well-being in all research. This paper addresses these and other issues, in particular, regarding the use of video methods in the home while working with very young children.

We argue that qualitative approaches are worthwhile, while acknowledging that studying very young children can be considered by some as practically difficult owing to their particular status as vulnerable beings, with cognitive, motor, and social capacities commonly viewed as immature. However, we suggest that media and communication scholars can learn from the field of early childhood studies that have posited other, assets-based approaches which may even offer opportunities for participatory approaches towards young children (Flewitt and Ang, 2020). The methodological challenges in studying children aged 0–3 is not

an excuse for not paying attention to them. If we ignore this age group, we risk not only a limited understanding of what growing up in a digital society means but also place ourselves in danger of being heavily influenced by confused fears and anxieties presented in media discourses. A review of these by Livingstone and Blum-Ross (2020) reveals a contradictory picture here, such as assumptions that children as "digital natives" are more capable than parents, juxtaposed with panics over "screen time" and so on. Recognizing that inequalities in access to technologies vary enormously, as do parental attitudes and practices, it is important to investigate diversities in childhood and very young children's everyday life with media and communication technologies.

So, it is timely but also challenging to study this age group in their homes. In the following section, we make a broad advocacy for ethnographic approaches to the topic. We then outline the design of our project, "A day in the digital lives of children aged 0–3," from which we draw on three cases from Sweden and the UK that we discuss in this paper. The heart of the paper is an exploration of methodological and ethical issues, which we see as constantly entwined (Kuntz, 2015), in specific events and dilemmas drawn from all stages of our work. Finally, we offer some conclusions including continuing challenges.

Ethics of research on and with very young children in media studies

We focus here on four aspects of ethical research on and with very young children in media studies: (1) regulations and guidelines; (2) the child as participant, not merely as subject; (3) a questioning of the concept of co-researcher in the case of very young children; (4) flexibility and an ethical responsivity to the unexpected during data collection.

Children have long been used as research subjects in various disciplines (Murphy, 2013). The history of research ethics is often connected to the aftermath of the 2nd World War and the ratification of the Nuremberg Code, the first formal set of ethical standards (Eldén, 2020). Today, we have regulations and laws for how to conduct research in an ethical way at the international level (see Table 1), at the European, and at the national/local level. These are mainly top-down documents, and they focus on *researcher* ethics and overall research integrity more than *research* ethics, that is, the practices of researching responsibly. There is little guidance in these formal documents on how to involve children in research in an ethical way. In that respect, two documents are worth taking into consideration. First, the UN Convention on the Rights of the Child (UNCRC), second the ERIC compendium. Even if the UNCRC does not explicitly discuss research rights

for children, it declares that all researchers need to consider, respect, and protect children's rights in all circumstances. The ERIC compendium is a result of a bottom-up process involving researchers from many settings across the globe in an effort to build capacity and provide guidance on ethical issues that may arise in research with children. It underlines the relational nature of research ethics, and the practice of ethics as constantly negotiated within these relations. The interactive and organic nature of research as well as the need for reflexivity in ethical practice are key points and resonate with our arguments as developed below.

Table 1: Samples of regulations and ethical principles.

Examples of international and European codes of ethics	Examples of domestic laws and codes of ethics	Examples of codes of ethics in research involving children
The Singapore Statement on Research Integrity (2010) https://www.wcrif.org/statement	The Swedish Research Act (SFS no: 2003:460) https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/lag-2003460-om-etikprovning-av-forskning-som_sfs-2003-460	ERIC-compendium (2013) https://childethics.com/wp-content/uploads/2013/10/ERIC-compendium-approved-digital-web.pdf and the web resource http://childethics.com
The European Code of Conduct for Research Integrity. ALLEA: All European Academies (2017) https://allea.org/code-of-conduct/	The Swedish Research Council: Good Research Practice (2017) https://www.vr.se/english/analysis/reports/our-reports/2017-08-31-good-research-practice.html	UNCRC (1990) https://downloads.unicef.org.uk/wp-content/uploads/2016/08/unicef-convention-rights-child-uncrc.pdf

Children's participation and active involvement in research has been widely discussed within childhood studies; more so than within communication and media studies (Johansson and Karlsson, 2013; Mayne and Howitt, 2019). Claims have been made that children should be able to contribute to decision-making but also that children should be valued more in research and that their interests and perspectives should be attended to (Kyritsi, 2019, p. 39).

Traditionally, children were considered as incomplete and not yet fully human and were therefore excluded from full participation in research. Instead, their voices were channeled through their custodians, reporting their experiences and interpreting their opinions and ideas. Today the idea of children as "beings" instead of "becomings", as active social agents instead of passive objects, has

been embraced and acknowledged by most researchers in the field of the sociology of children (Kyritsi, 2019; Parnell and Iorio, 2016). Childhoods as well as the children themselves are recognized as varied, complex, and pluralist in appearance, with their own rights as expressed by the UN Convention on the Rights of the Child, which in Sweden has been promulgated into a law. Despite our recognition of children's agency, their lives are most often decided by adults (Prout and James, 1997), and there is a need to make them more visible in research across all sectors of the social sciences.

The concept of co-research has increasingly percolated into early childhood research, including children as active participants (Flewitt, 2020). It has been increasingly recognized that treating parents as proxy consent-givers for young children is inappropriate and contrary to the United Nations Convention on the Rights of the Child (Dockett, Perry, and Kearney, 2013). The extent to which children under three can cooperate in, for example, research design or understand issues such as data sharing and dissemination is limited. Nevertheless, even if the concept of child as co-researcher is limited for this age group, we can advocate taking account of the child's agency and consent. Genuinely participatory approaches to research with young children need to recognize imbalance in power between the child and the researcher, accept that some children will not wish to join in, offer them accessible ways to decline, and eschew regarding children as a homogenous group (Flewitt and Ang, 2020). Whatever the challenges involved, researchers should strive to involve the child more directly in research and treat children as experts on childhood (Spriggs and Gillam, 2019).

Flexibility is required in research with young children and with their families in homes. Laboratory-based studies by their nature create highly constrained opportunities for action. Formal codes of ethics, often designed for the laboratory, are insufficient to prepare the researcher for complexities of the field (Wästerfors, 2019) and may even, due to their rigidity, jeopardize a truly ethical attitude (Eldén, 2020). A participatory design is a complex process, cared for and planned, yet evolving as it happens along the way. By its nature, everyday home life contains a measure of informality; when a researcher is present, this will be likely to elicit spontaneous responses. As will be discussed below, ethnographic approaches in particular do not seek to avoid such complexities but rather involve flexibility and an ethical responsivity to the unexpected. Thus, while commitment to appropriate formal codes of ethics is certainly needed, there is also a need for informal ethics, and researchers working with young children to take a "situated, dialogic and reflective ethics approach ... [that] involves a process of continuous, moment-by-moment reflection ..." (Flewitt, 2020, p. 66). Plainly, this can be demanding.

After acknowledging the importance of adherence to appropriate regulatory frameworks and guidelines, Flewitt and Ang (2020, p. 31) add: "Applying ethics

principles in practice is a complex and dynamic process that requires critical reflection throughout all stages of research – from the very inception of a project to the long-term dissemination of research findings." We seek to illustrate this in our reflections on our practice of working with very young children at home.

2 Methods: An ethnographic perspective

We advocate taking an ethnographic approach to research design since this combines a commitment to reflective, situated ethics, with the object of coming to understandings of quotidian interactions involving very young children and their families. Here it is useful to make use of the distinction posited by Bloome and Green (2015, p. 183), drawing on their earlier work, between "doing ethnography" and "adopting an ethnographic perspective". The former is particularly associated with anthropology and involves a long immersion in the environment. Taking an ethnographic perspective, or approach, to studies of everyday life as in our project meant that we did not attempt a lengthy period of immersion in the families' homes. We did want to experience the everyday, as far as possible, recognizing its inevitable moderation through our presence, as we endeavored to understand the practices, values, and attitudes of the family. Combining visual methods with interviews to explore access to digital media in terms of including material, skills and cultural preference is fast becoming an established method in the investigation of "digital childhoods" (Roos and Olin-Scheller, 2018, pp. 52–53). Further, we also need to acknowledge a key limitation: that even though we seek to honor the perspective of the research subject – the child –, an adult researcher will never be able to fully participate in the children's world since the researcher is no longer a child (Corsaro, 1997; Källström and Andersson Bruck, 2017).

 We draw from our experiences of taking an ethnographic approach to young children's digital media lives in their family context, in Sweden and the UK.

"A day in the digital lives of children aged 0–3" research design

"A Day in the digital lives of children aged 0–3" was initiated within COST Action IS1410 The Digital Literacy and Multimodal Practices of Young Children DigiLitEY and conducted in 2017–2019 across 14 families in 6 European countries. The aim of the project was to identify the ways in which digital technologies permeate the everyday lives of children aged from birth to three years old.

We applied adaptations of the "A day in the life" methodology (Gillen et al., 2007; Gillen and Cameron, 2010), which has been used in many contexts across the globe in investigating aspects of resilience in early childhood (Cameron, Pinto, Hunt, and Léger, 2016; Gillen and Cameron, 2017). The methodology developed from this study included three visits to each participating family by two researchers: 1) Preliminary visit including discussion of methodological and ethical issues and pilot filming; 2) One day video filming; and 3) Discussion of a half-hour compilation video distilled from the day video. Furthermore, in alignment with our specific interest in this project in the digital environment, we used semi-structured interviews and inventories of digital technologies (see Gillen et al., 2019 for the full project report). The choice of video as a primary mode of investigation brings visual methods to the forefront.

Aarsand (2016, p. 91) calls the video camera the "microscope of social science". Video can expose traces of everyday practices, enabling explicit returns to discussion of events in dialogue. "Video is understood as a praxeology of seeing and working with the camera" (Tutenel, Ramaekers, and Heylighen, 2019, p. 642). Video cameras, sensitively deployed in participatory dialogues, are particularly suitable for the exploration of children's perspectives when expanding understanding of their interactions and values beyond those that are verbally expressed (Quiñones, Li, and Ridgway, 2017).

We required a highly participatory approach to the study, considering methodological responsibility as dynamically shaped and reshaped in our relations with child, family, and data. Our detailed discussion of methodology is permeated by reflections on the research design and issues encountered by us in the moments of data collection, analysis, sharing with team members, dissemination, etc.

In the following sections we will discuss our experiences gained from our research study, seeing methods and ethics as always entwined. We use Kuntz's (2015) concept of methodological responsibility as a prism to reflect upon our work. The analysis is ordered according to the phases in the "A day in the digital lives of children aged 0–3", and our arguments are illustrated with examples from interviews, videos, and field notes from two Swedish case studies and one case study from the UK. Table 2 gives some brief details of the cases; facts are as on the main day of filming. (For more details of the cases, including technology use and access, please see Gillen et al., 2019).

Table 2: Brief presentation of cases.

Case	Anna – Sweden	Oscar – Sweden	Lily – UK
Age	30 months	30 months	14 months
Parents/caregivers present with occupations and nationalities	Mother (civil engineer) – all day. Father (civil engineer) – 3 hours in the afternoon. Both Swedish.	Mother (medical professional) – all day. Father (medical professional) – part of day. Both Swedish.	Mother (student) – all day. Father (at home, occasional manual work) – most of day. Both Malaysian.
Number and ages of siblings present at any part of the day	Brother – 4 months old	Brothers – 7, 9 yrs.	None

3 Discussion of the research experience

Recruitment and initial consent: Processes and ethics

In the three cases reported here, we used personal and professional networks to get in touch with families with a child in the appropriate age group. We realized that it could be a challenging involvement for the families: Potentially at risk was their privacy and their values in respect of their most precious and dear ones, their children, may be revealed. From the beginning we found that demonstrating sensitivity to this challenge, and showing our academic and personal credentials to build trust in our honesty and integrity and that of the project were the most essential aspects of recruitment and successful development of the project.

Initial phone calls or e-mail discussions were accompanied by copious information about the project. All the information and consent documentation is not included here for reasons of space. We do include a document which might be relatively unfamiliar and interesting: Appendix A is a template used in project discussions about confidentiality, data sharing, and dissemination. In different countries it was applied in different ways. In Sweden, it informed participants about our writing the application to the institutional ethics board. It was decided we should not suggest sharing the Swedish data with European partners across the project. In the UK, the template was used as the basis for direct discussions with participants, some ticks and crosses being included so as not to pressure them into wholesale agreement of everything mentioned. This approach had been approved by the local institutional ethics board. Working in cross-country

teams must allow for adaptation to the different local regulations and even divergent views on issues such as negotiating consent with families. An outcome of diverse approaches across the project was that participants from various countries joined the project with different attitudes towards data sharing and dissemination, something which across the project we interpret as a healthy confirmation of our ethical vibrancy.

First visit: An initial dilemma and ensuring the child's consent

Our first visit to a home was a key point for exploring consent with the child and the consequences of a project-wide decision not to offer remuneration. The first visit to a home was one to two hours long, at a time of the family's choosing. Although our preference was for both parents to be present, in one case the father could not be present. Information and consent form were distributed before the meeting, and the consent form in this case was signed by both parents beforehand. The mother explained at the first visit that the father was supportive of the research but preferred not to participate himself. We had three major aims: first, to discuss the conduct of the project and ensure that all verbal and written consent was carefully negotiated and differential as the families wished. Second, to try out the pilot filming. Ahead of both of these priorities, however, was the need to establish good relations with the child and family, especially to ensure the child's consent. One immediate dilemma was how to balance the ordinary cultural requirements of politeness involved in meeting a family in their home with the overall tenet of the project in which we had agreed not to offer any financial remuneration. This had seemed a simple decision but created some minor pressures for us as, effectively, house guests. In the Swedish studies, we used tiny, very inexpensive books to satisfy our need to bring a small gift and as icebreakers in the chats with the children. We brought Pixi books, tiny books measuring 10x10 cm and sold for approx. 1.50 Euro. On our second visit, we returned to these books to start a conversation with the child, to remind them about the first visit and the reason for us coming back. We are aware that it could be considered that even these were a kind of bribe or reciprocal contract between the child and the researcher, misleading the child to believe that the researcher expected a form of payback. We cannot know how these props were interpreted; we do know that they assisted the beginning of conversations with the children. In the UK, we had decided from the outset to maintain the emphasis on no remuneration but at the very end of the project brought small gifts for the child hoping to bring a pleasant surprise and satisfy some demand of common courtesy (Källström and Andersson Bruck, 2017).

The issue of ensuring a young child's consent to being involved in a research project is thought-provoking. Further, the level of oral discussion with a thirty-month-old as in the Swedish cases is different from when the child is fourteen months old as in the British case. Nonetheless, we take the attitude that consent (or, as some researchers prefer to call it when written confirmation is not produced, assent; see e. g., Conroy and Harcourt, 2009) can be expressed if an appropriately intersubjective, multimodal approach is taken.

Lily in the UK was immediately happy to have us as visitors, frequently smiled and took a lively interest in our research equipment. Anna in Sweden met us at the door at the beginning of the first visit; she also was highly interested and curious. We had a different initial experience with Oscar: When his mother opened the door, he stayed a long distance away and appeared shy. We were welcomed in and sat closer to Oscar, who maintained his attention on a TV program. When the episode finished, he preferred to watch another. However, it was the interactions with first the little book, as explained above, and then fetching the camera equipment that caused a great change in behavior; he then wanted to move close to the researchers and interact with them. Our field notes take up the story:

> Once the camera is on the tripod, he wants to see himself in the camera. The camera is running, and we flip out the little screen for him to watch himself while he is standing in front of the camera. He seems quite happy and moves around. I ask him if he could show me his toys. Soon he invites me to play the balloon game, a board game, and we play it for a while on the floor next to the camera. When I want to stop, he wants to continue, we play for a while, and when we are done, he wants to play another board game, the *Pingu* game. The first visit ends by him showing us around. His room first. I walk along with the camera. He climbs into his bed and pulls up the cover and cuddles with his stuffed animals. He also proudly shows us a foot cast and a hand/print he made in nursery school. [...] Before we go we say thank you to Oscar and his mother,and we ask him if we are welcome back for a second visit to spend a day with him. He nods and says yes. [Field note extract]

So, the first visit with Oscar actually led to more prolonged interactions with the child than in the other two cases. In each case, however, enjoyment and positive affect, readily confirmed with the parents, was taken as at least provisional consent to pursue the project.

Videoing "a day in the digital life" of a child: Three aspects of participatory research

There are so many topics that could be discussed here as we reflect on the experience of spending a day in a home that included a young child, while using a video camera and endeavoring to pursue our values in methodological responsibility.

We note that many of them depend on the paradigm of research employed. For example, the presence of the researcher is a vital topic to take into consideration and reflect on in all ethnographic work, but will be likely to create unease to scholars who prioritize research methods in which the researcher's presence can be bracketed off (or where they think it can). There is a vast amount of literature discussing this. and with reference to the "Day in the Life" methodology, we refer the reader to Hancock, Gillen, and Pinto (2010). In this section, we choose to take up three topics. The first, developing onwards from the previous section, is the issue of the child's consent. The second relates to the use of the camera (and of course, the researchers using it). Finally, we discuss how prioritizing the idea of participatory research entails work moving in unanticipated directions.

First, to take up the issue of consent, we did not see this as only aligning to the agreement made in the first visit but as remaining flexible and acting in accordance with the family's cultural preferences. In Lily's family home, we did not move out of the living and kitchen areas except when briefly using a bathroom ourselves. This gave them some space for intimate activities including personal cleaning and prayer. When Lily went to sleep in the living room, we took this as a sign we should leave for a while and discussed with the parents when we might return. We stopped and started the camera in accordance with what we had agreed in discussions with the parents but also with what we thought best as we went along, for example, when Oscar's potty was brought into the living room. Consent is not a fixed agreement, but rather flexible, negotiable, and processual being modified along the way; withdrawal is also possible (Flewitt and Ang, 2020; Källström and Andersson Bruck, 2017). In both Swedish cases, we asked the child if we could return for a third visit. This kind of ongoing consent is a way of respecting the child's rights and wishes but also to remind ourselves and make our roles and the power dynamics between researcher and child visible.

Second, we note that the contrasting home spaces between Sweden (both cases) and the UK shaped our different responses to use of space and the presence of the camera. In Anna's home, for example, we tried to keep the camera at a certain distance from the child and to marginalize our own presence. For example, we tried leaving the camera in the hall doorway so we could sit or stand some way behind it. However, we had to react in a responsive way to the child, who preferred us to be close and to sometimes engage with the camera. So occasionally, she danced in front of the camera or pushed her baby brother in front of it. Occasionally, she decided she would like to interact with the researchers, sometimes asking to sit on a lap or do our hair, for example. We felt that we should participate with her in responsive warm ways but take care not to initiate or prolong such contacts. They were part of the *day*. A contrast here could be made with the *day* in Lily's home. We spent the time together in a small apartment so that when filming

we could never be more than three meters away from the child at most. Therefore, the camera and researchers were always extremely close to her when filming was going on. As in Sweden, we felt it important to respond warmly to Lily's initiatives and allow her to play with the camera (while carefully looking after her and its safety), our notebook, and so on. But the very limitations on our own mobility in the room eventually caused us to become, we think, somewhat predictable and limited in our activities and interactions as we sat or stood silently, scribbling, or looking through the viewfinder. Lily certainly paid her parents, digital media, other toys, and features of her environment far more attention than to us overall.

Third, with regard to maintaining flexibility in methodology, we find that taking a participatory approach entails recognizing and accepting participants' rights to alter the course of research from how it may be initially envisaged. Anna's father arrived during the afternoon and took considerable interest in the study, understandably talking to the researchers about it. In the course of the dialogue, he decided to bring down from upstairs a tablet and ask Anna to demonstrate her skills with a particular app. She enjoyed doing this but there was a little family confrontation when she did not want to stop at her parents' suggestion. We were pleased at the demonstration of knowledge but simultaneously a little uneasy at both the nature of the intervention contra the quotidian observation technique and of course at the brief discomfort that later ensued.

Follow-up meeting: Seeking out family perspectives

The follow-up meeting lasted 1.5 to 2 hours, during which we watched the video compilation with the family. We stopped after each scene to ask for reflections and reactions from the family or simply to ask them to explain the situation. Exemplars could be a situation of digital media use or otherwise. For example, Anna was shown not wanting to talk with her granny on FaceTime when she was playing with her wooden train. Her mother had tried to hand over the smartphone, but Anna had firmly rejected it. This instance of rejection created an opportunity to talk about Anna's actual use of the smartphone and communication with family members outside the household.

In our interviews, we drew from several themes from a common interview guideline, such as children's access to, uses of, and interactions with, the digital technology, attitudes to and competencies when it comes to digital technology as well as perceptions, norms, and values in the family around digital media technology. The interviews were voice-recorded. Both researchers were present.

The design of our research had allowed for the child's perspective to be captured, mainly through the video filming of the *day*. During the *day*, the video

camera follows the child closely and focuses on its activities exclusively. Yet, there are opportunities for also involving the child in the follow-up interview. So how did we involve the children in this stage of the research? How did we make their voices heard?

In the British case, the child's perspective did not really arise in the iterative stage. The very young girl was simply not interested, something researchers need to accept and respect, rather than try to push the child into unwelcome interaction. The parents, however, were keen to discuss her development and changes.

In one of the Swedish cases, we watched the video with Anna, her parents, and the baby brother, rocking in a baby chair on the floor. Anna was pleased to have us back. She was also present for most of our talk with the parents, and she watched the video with us, encouraged by her parents and ourselves. Anna paid attention to details and enjoyed seeing her family members and herself on the screen. For example, she said happily "That is mummy", on her mother's first-time appearance. Later she pointed to the screen and asked: "What's going on?" We paused the video and explained: "We were looking for a particular block, with a bear on …" as a way to pay attention to her and acknowledge her interests. We also posed questions directly to Anna during the conversation if appropriate, and if the child demonstrated curiosity or attentiveness. Two short transcripts from the iterative interview demonstrate how we did this.

Example 1: Changes in Anna's media use since the last visit

> Mother: Now she kind of doesn't watch YouTube at all, she is on the Children's channel app and watches such little movie clips from there …
> I: Yes, when we were here you were watching *Bolibompa* (program for children on PSB) in the evening (addressing Anna).
> Mother: Yes.
> I: So, Anna, are you watching *Bolibompa* online?
> Anna: I watch the Doll [*Dockan*] and Mummy Moo [*Mamma Mu*, popular Swedish media character].
> Mother: Yes, you are watching The Doll and Mummy Moo more now.
> I: So, she uses the web site more … (returning to the mother).
> Mother: Yes, exactly.

In example 1, the child both confirms information and adds valuable details. Even if it is just a brief turn of a few words, it puts the girl in the position of being expert, knowing best, in her experience.

Anna's attention varied over the session. Afterwards we felt that we should have engaged her more. She was, as shown in the example above, interested

and willing to participate, but we tended to talk more to the parents than to her. We asked her some questions, and she commented on a few things in the video. Yet, we might have taken more advantage of her skills and enthusiasm for communication. The *day* had shown that Anna was talkative with her parents, little brother, and ourselves. In addition, her embodied multimodal responses of gesture and movement contributed to her overall eloquence and capacity to participate fully in the research. What is also evident from a more detailed reading of our transcripts is the empowered child and the negotiation of power dynamics in the research situation, illustrated in the next example.

Example 2: Child decides when to engage

> We continue watching the video.
> I2: She asks a lot for grandpa ...
> Mother: It is usually both.
> I2: Anna, do you recognize the horse in the movie?
> Anna does not answer; she plays with something at the table.
> I2: Now it's *Bolibompa* time. Now you have switched to pyjamas and the skirt (interviewer is commenting on the video trying to get the attention from Anna).
> ....
> Anna: Now I can watch.
> Mother: Yes, now you can watch.
> I2: I thought with the tablet you were sitting on the couch. Is it the same place, the same ritual, the same situation?
> Father: Yes, it is. We eat, we clean, and then we sit down.
> Anna: It's *Bolibompa*!
> I1: Yeah, the Dragon [a character in the *Bolibompa*).

Example 2 illustrates the flipped-over power dynamic in the situation. The young child demonstrates her agency. Anna participates in the research on her terms. She pays no attention to the researcher's question, she prioritizes her things at that moment and continues to play. Shortly thereafter, she declares that she is willing to be part of the conversation and video session again, stating clearly: "Now I can watch."

Oscar did not initiate contributions to the discussions in the iterative follow-up meeting. He was encouraged to by his parents but rejected all opportunities, demonstrating that he was far more interested in his new digital device, a smartphone, which included an app that had just been installed for him. As researchers we entirely understood this preoccupation with the present novelty over the interest in his past that his mother evinced.

Interviews, observations, and other data from the families were organized and analytically structured according to certain themes and research questions for comparative reasons. The results are summarized in the final report (Gillen et al., 2019). In this article, we do not focus on the analysis of the empirical material per se but on the analysis of our reflections and experiences from the field. Thus, the analysis of our data, which is the next phase in the research design, is not further elaborated here.

Data sharing and dissemination: Key decisions

It is important to offer participants the opportunity to share research findings (Johansson and Karlsson, 2013; Kellett, 2010). This was done in different ways. In all the studies, the compilation video was shared with the family on a flash drive for personal use and for the child to watch repeatedly. We would have been pleased to share the entire video footage with the families, but they did not want this. They were later sent the project reports (UK) and information about forthcoming publications and links to open-access sources (SWE). We now zoom out to issues of data sharing within the wider project team and then further dissemination.

With contemporary technological and social developments, data capture and sharing has become technically easier than ever, and at the same time, sensitivities towards sharing have, understandably, increased in many research communities. Data collection is embedded in complex domestic and supra-national regulations to protect privacy, such as the European General Data Protection Regulation (GDPR) and the American Children's Online Privacy Protection Act (COPPA) (Foucault Welles, 2016). Researchers face increasing demands for data management plans from funders and research institutions to document data capture and control data storage. While regulations concerning data and integrity issues are becoming stricter, there is a counter-movement within the research community, promoting open access of research data and cross-country collaboration. These trends are not necessarily fully compatible and aligned, especially where participants viewed as vulnerable, such as young children, are concerned. Thus, it behooves the researcher to be extremely careful, placing the children's and families' best interests first. A minor exemplar of this is the use of pseudonyms: In Sweden, these were selected by the research team, in accordance with the consent form and institutional ethical procedure; in England, these were selected by the families.

As much as digitalization of data and research might facilitate research, there are also some challenges when it comes to the sharing of data within a research

team, and sometimes constraints in cross-country collaboration due to different ethical regulations and demands on handling data. The project shared a secure cloud-based system, but what each team shared there varied. The UK team shared Lily's data in accordance with the family's wishes and the institutional ethical agreement specifically designed for this project. In Sweden, no raw data were shared, and any screenshots shared had to be anonymized, not showing the face of the child.

This considerable differentiation narrowed as we worked towards publication. We were influenced here by the DigiLitEY practice of avoiding illustrations from empirical research and using a great number of commercially produced, accessible "stock" photos in reports such as that of this study (Gillen et al., 2019). There, commercial illustrations were mostly employed together with a few from actual project data including Lily. Even here, however, despite the fact that we had authorization and even encouragement to do so, we did not show Lily in an identifiable way.

In Sweden, anonymizing pictures set off many questions. Is a filtered image acceptable and anonymous enough? Is a picture with blurred faces safe to publish? Possibly, there might be differences in cultural attitudes to this, partly because Sweden has a relatively small population and participants run a higher risk of identification. In the same vein, there was concern about how to anonymize a home and/or its location. We avoided referring to specific places, even region. This question did not arise in the UK, where accommodation was temporary, but nonetheless the city was not mentioned in dissemination.

The challenge between respecting personal privacy and seeking authenticity in research with families when employing visual methods has to be met thoughtfully. Such actions as anonymizing pictures of homes, household members, and perhaps incomers who have strayed into view without necessarily being part of the research, are often, understandably and properly, employed. Yet this draws attention to the inescapable tension between giving voice – safeguarding authenticity and truthfulness – and blurring expressivity by editing details in texts and visual elements to make them impersonal and "average", thus, impossible to recognize (Tutenel et al., 2019, p. 647).

4 Conclusions

In this article, we argue for the need for ethnographic approaches in researching diversities in very young children's digital media practices in everyday life. Cross-disciplinary collaboration between media and communication scholars

and early childhood researchers would be advantageous when setting future research agendas with regard to very young children, and methodological responsibility must move beyond procedural/formal ethical considerations (Tutenel et al., 2019). We draw from our experiences of doing research in the homes of children aged 0–3 in Sweden and the UK to highlight the need for flexible and in-the-spur-of-the-moment ethical reflections in every phase of the research (Guillemin and Gillam, 2004). This is often challenging. Child consent is not a fixed thing but needs to be renegotiated with the child and family with regards to every stage of the research, from recruitment to dissemination of data and results. Reflexivity safeguards rigor as well as flexibility in research and should embrace the whole research process (Flewitt and Ang, 2020).

We found that using a video camera, with some footage revisited in a further visit, encouraged the participatory dimension of our research. Video data can be a true asset in doing microanalyses of children's actions in their natural setting, stimulate valuable reflections with the family, and also enable critical reflection upon the researcher's role. Another challenge lies in developing cross-country collaborations without breaking local regulations and frameworks while allowing, indeed welcoming, thoughtful diversity in such practices.

In conclusion, we argue that methodology and ethics are inextricably entwined, and that a great deal of thought is needed at every stage of research. As Kuntz (2015, p. 88) asserts: "Considerations of methodological responsibility … must extend beyond procedural ethics to the very ability to encounter and relate within unknown ways of knowing and coming to know."

More training and support for researchers involved in thinking through ethical issues involved in working with young children would be desirable (Spriggs and Gillam, 2019). Nevertheless, rewards, in terms of gaining understandings of complex phenomena with regard to communications in society, are tremendous.

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Appendix A

Data sharing agreement discussed and modified with participants as part of the information and consent procedure.

Data	University Access	COST Working Group 1 access	Academic Publications including journal articles, conference papers and COST reports	Public outputs: COST website; institutional websites; practitioner conferences or websites etc. in the public domain
Personal information (names and identifiable textual information)				
Visit 1: Interview data (anonymised)				
Visit 1: Pilot video				
Visit 2: *Day* – video data				
Visit 2: *Day* – transcriptions (including video stills)				
Visit 2: *Day* – transcriptions excluding video stills				
Visit 3: Compilation video				
Visit 3: Video of discussion				
Visit 3: Transcript of video discussion (incl. video stills)				
Visit 3: Transcript of video discussion (text only)				