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From "screen time" to screen times: Measuring the temporality of media use in the messy reality of family life

Abstract: The discrepancy between children's actual amount of viewing time and parents' accounts of their concerns, rules, and parental mediation choices has been documented in empirical research, and typically interpreted through the lens of the Uses and Gratifications theory – showing how parents change their attitudes towards screen media in order to satisfy their own needs. Based on a qualitative longitudinal research project, including app-based media diaries, with 20 families with at least one child aged eight or younger, we aim to make two contributions to the literature. With regard to theory, we aim to highlight the heterogeneous and contingent ways of balancing the place of digital media in children's lives that arise from parents navigating screen time discourses, social pressures, and daily schedules. With regard to methods, we argue for the combination of qualitative data and app-based media diaries to contextualise and interpret potential discrepancies between reported screen time and parental anxieties or hopes about digital media.

Keywords: screen time, children, parental mediation, parenting, media diaries

1 Introduction

By the time broadcast media entered the domestic environment, much had been written about the role of the media in shaping the experience and organisation of time in family life: For example, scholars have emphasised the role of broadcast media in providing a shared temporal framework that forms the background of many domestic routines (see Scannell, 1996); more recently, the emergence of novel, "transcendent" (Lim, 2019) parenting practices, supported by mobile media and the micro-coordination of hectic family schedules, has been theorised. The Domestication of Technology approach (Haddon, 2011; Silverstone et al., 1992)

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examined the temporalities of media use as a crucial indicator of how digital media were incorporated into households' everyday lives – including questions of how digital media fit into people's temporal routines or generate new routines, which roles technologies come to play in their lives, how they are used and made sense of, and how they are regulated. In a nutshell, it addressed questions of how digital media are adapted to fit a specific social and cultural context, while simultaneously changing this context.

Therefore, time is a central dimension to look at for a deeper understanding of how families with children appropriate, use, and negotiate digital media in their daily lives. However, children's media time has mostly been examined in the light of negative outcomes for children's cognitive, psychological, social, and physical development (Beyens et al., 2018; Cingel and Krcmar, 2013; Jordan, 2004; Przybylski, 2019; Valkenburg, 2004). Not only has the focus on (negative) effects represented the "dominant paradigm" in the study of children's uses of media in the context of the home and family life (Hoover and Clark, 2008); it has also informed much of the social discourses on this topic, and influenced parental approaches to media in the home. In fact, fears for harmful effects of screen exposure on child development, the expectation that parents should minimise children's encounters with screens, and prescriptions over what is an acceptable amount of viewing time by children of different ages, have all been condensed in the still powerful, although highly contested, concept of "screen time" (Blum-Ross and Livingstone, 2018). Screen time is discursively constructed as a normative tool, on the basis of which parenting is scrutinised and judged by experts, policy makers and, also, other parents (Livingstone and Blum-Ross, 2020). Yet, public discourses around screen time are contradictory in nature, praising the educational opportunities of digital media for children's future while simultaneously warning against harmful effects. Moreover, screen time prescriptions neglect the specificities and complexities of family life, resulting in a "troubling paradox" (Blum-Ross and Livingstone, 2018) for parents, who value the opportunities and conveniences of digital media while being pressured to conform to normative "good parenting" standards.

In this light, researchers have called for a shift in focus, from the morally charged notion of screen time – narrowly defined as the overall amount of time spent in front of a screen – to a deeper understanding of "what (the content), how, where, when (the context), why, and with whom (the connections) children are watching, playing and doing things with the media" (Livingstone and Blum-Ross, 2020, p. 56).

However, examining children's and families' screen times as an indicator of the diverse domestication practices through which each family appropriates digital media is challenging. In fact, parents' definitions of screen time are influenced by dominant social discourses. Hence, in this study we aim to make two contributions to the literature. With regard to theory, we aim to highlight the heterogeneous, con-

tingent, and complex ways of balancing the place of digital media in children's lives that arise from parents navigating screen time discourses, social pressures, and daily schedules. Second, with regard to methods, we argue for the combination of qualitative data and app-based media diaries to contextualise and interpret potential discrepancies between reported screen time and parental anxieties or hopes about digital media. To address these issues, we draw upon longitudinal qualitative research, involving observations, interviews, and app-based media diaries, with 20 Italian families with at least one child aged eight or younger.

2 Research on children's screen time

Most effects-oriented approaches to measuring young children's screen time in the domestic context have examined the predictors of children's viewing time – including parents' education and socioeconomic status (SES), the availability of different digital media at home, family structures, and parents' attitudes towards screen media. The findings reveal consistent patterns, at least in Europe and North America. First, children's screen time is consistently found to be associated with parents' education and SES. Children of lower-educated, lower-SES parents are more likely to have longer screen times (Rideout, 2017; Tandon et al., 2012). However, studies comparing children's screen exposure over time point to a steeper increase in the amount of viewing time in higher-educated and wealthier families. In other words, while children from lower-SES families continue to spend more time watching television and playing videogames, their overall screen time increased less (5 minutes) than the screen time of children of higher-SES parents (25 minutes from 2012 to 2018) (Nikken, 2022).

Furthermore, sociodemographic variables interact with family structure and the domestic media environment in shaping screen exposure. In fact, while wealthier families are generally early adopters, over the years single parents and lower-educated households have adopted digital media at a faster pace (Nikken, 2022). Single parents are also more likely to provide children with digital screens in their bedrooms (Livingstone et al., 2015). Greater availability of digital media at home (Nikken, 2022), and bedroom access to screen media (Elias and Sulkin, 2019; Livingstone et al., 2015) are associated with more screen time. Other family characteristics, including the presence of older siblings (Holloway et al., 2013) and mother's employment (Beyens and Eggermont, 2015), are found to play a significant part in explaining greater exposure to screens.

Finally, important predictors of children's daily viewing habits are parental mediation strategies and parents' attitudes towards media. Far from surprising,

restrictive mediation of children's digital media use – setting rules limiting the amount of screen time and/or exposure to inappropriate content (Livingstone et al., 2017) – is linked to children generally spending less time in front of screens. Conversely, parents of heavy viewers typically engage in laissez-faire parental mediation (Elias and Sulkin, 2017). Co-viewing is also associated with greater exposure to screens (Elias and Sulkin, 2017). The role of parental attitudes towards digital media in predicting screen time is more ambiguous. In fact, parents who self-describe as more positive of the educational or entertainment value of digital media for their children are more likely to let their children use screens for longer (Beyens and Eggermont, 2014; Elias and Sulkin, 2017). More surprisingly, though, parental anxieties over the harmful effects of excessive screen exposure do not necessarily lead to lower amounts of daily screen time (Beyens and Eggermont, 2014; Elias and Sulkin, 2019; Nikken, 2022).

The contradiction between parental concerns about excessive screen time and children's daily digital media use may sound problematic. However, tensions and ambiguities of this kind are part of how families domesticate digital media and navigate conflicting demands, including balancing childcare with work and household chores. To counter linear and simplistic explanations of screen time, empirical research has increasingly taken into account "screen-assisted parenting" practices (Elias and Sulkin, 2019). This refers to parents employing digital media as a parenting tool to assist them in managing hectic schedules and conflicting duties. A growing body of qualitative and quantitative research has documented the use of television or touchscreens as "digital babysitters" to keep children occupied and entertained, or as "digital pacifiers" to calm them down in public places (Bar Lev et al., 2018; Beyens and Eggermont, 2014; Elias and Sulkin, 2017, 2019; Haddon and Holloway, 2018; Holloway et al., 2014; Nikken, 2022).

Beyens and Eggermont's 2014 study found that the use of television as a babysitter is significantly predicted by parents' attitudes towards screen media, while in turn predicting increased time spent watching television. Moreover, not only children of parents holding strong positive attitudes towards children's television, but also those of higher-educated parents are more likely to experience excessive screen time if parents turn to television to keep them occupied. Therefore, the study points to the mediating effect of using media as babysitters, as it is associated with parental attitudes and education, and in turn contributing to more time spent watching television. Similarly, Elias and Sulkin (2019) found that toddlers' screen time during weekdays is correlated with a "babysitting" use of touch screens to keep children occupied or to facilitate meal- or bedtimes. On weekends, instead, parents are more likely to turn to screen-assisted parenting practices in order to regulate children's moods or reward them for desirable behaviour. In sum, these studies suggest that the relationship between parents' negative attitudes and

children's digital media use is not linear nor causal. Rather, it is reciprocal and moderated by everyday life schedules and time pressures: Parents who need screen media to babysit their children tend to develop more positive views of media (Bar Lev et al., 2018). In other words, parents avoid dissonance between their concerns about excessive screen time and the need to use media as digital babysitters/pacifiers by developing "a set of beliefs consistent with their digital parenting practices" (Bar Lev et al., 2018, p. 111).

This line of research, therefore, interprets potential contradictions between screen-assisted parenting, children's media use, and parental attitudes through the lens of the Uses and Gratifications theory (Beyens and Eggermont, 2014; Elias and Sulkin, 2019), identifying a typology of needs parents may satisfy by turning to screen media, including: keeping the child occupied, regulating their schedule, rewarding positive behaviour, calming the child, using the screen to facilitate meal- or bedtimes, creating "family time" to reinforce parent-child bonding. In so doing, it is argued that "parents fulfill not only the child's needs but also their own child-rearing objectives" (Elias and Sulkin, 2019, p. 2815).

Domestication of Technology analysis provides a further, complementary, way to interpret the contradictions between families' approaches to media, rules and policies for media use in the home, and children's actual screen time. It is an approach that looks beyond immediate issues of childrearing to understand the broader context of families' lives, including contexts beyond the household that shape families' own media cultures and practices. In fact, "the strength of the domestication approach lies in providing the context to people's ICT decisions (over and above looking at, say, gratifications, as in the 'uses and gratifications' framework)" (Haddon, 2011, p. 314). Accordingly, researchers have emphasised parents' reservations about using digital babysitters, and the sense of guilt and frustration experienced for failing to conform to "good parenting" ideals (Blum-Ross and Livingstone, 2018; Haddon and Holloway, 2018; Livingstone and Blum-Ross, 2020). These works point to the growing pressures of public discourses on "good parenting," largely informed by a middle-class model of "intensive" parenting (Clark, 2013; Livingstone and Blum-Ross, 2020), while simultaneously accounting for the diversity and specificity of each family. Moreover, they emphasise how the perceived stigma attached to children's media use (Haddon and Holloway, 2018) leads parents to underestimate children's engagement with screen media, and to "ill-defined" understandings of excessive screen time (Blum-Ross and Livingstone, 2018). Therefore, parents do not necessarily develop positive understandings of the role of media in children's lives to compensate for their own sense of frustration generated by the use of digital babysitters. Rather, they navigate the fragile balance of opportunities and risks of the media for children in the context of the complex management of everyday life, and against the backdrop of normative social discourses.

3 Methods

Study design

This article reports the first findings of a longitudinal qualitative research project involving 20 families with at least one child aged eight or younger in Italy, aimed at investigating the datafication of childhood and family life as a socially situated, everyday, and embodied experience. Families were recruited using a snowball sampling technique – i. e., we asked colleagues and acquaintances to distribute digital and printed flyers illustrating the scope of the project in both their workplaces (hospitals, call centres) and online circles (Facebook or WhatsApp local parenting groups). While small in number, the sample (Table 1) represents a diverse demographic range in terms of income, family structure (many having multiple children ranging from zero to 14 years old), ethnic background, and religious participation.

In the first wave of data collection (November–December 2021), families were interviewed at home based on the following protocol: First, parents and children were involved in an ice-breaking activity (a card game showing pictures of everyday activities that children, with the help of their parents, would sort out to tell about their everyday routines); next, one researcher followed the child in a toy and digital media tour (Plowman and Stevenson, 2013), while a second researcher interviewed parents about the family's media practices, parental mediation, their expectations and fears around digital media and IoTs. In the second wave (April–May 2022), the researchers conducted group interviews at home, using the map drawing method (Watson et al., 2022). Parents and children were instructed to draw a map of their homes, visualise the digital media in each room on a blank paper, and mark, with different colours or arrows, who mostly used which media, and how some media moved across various spatial trajectories during a typical day. Each interviewee was invited to present their map to the researchers. The maps, then, served as visual prompts to stimulate discussion among family members about family routines and power relations around media and material space.

At the end of the second interview, parents were invited to fill out a digital media diary on the MeTag[1] app for one week. They were asked to record the selected child's (see Table 1) interactions with digital media each day, indicating the device used (through a predefined list), the start time and duration of media use, the practice (e. g., watching videos), the context (e. g., the living room, bedroom),

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[1] MeTag is an open source software application "for collecting, analysing and visualising data from digital media diaries" developed by Andreas Hepp, Florian Hohmann, and Alessandro Belli at Zemki, Zentrum für Medien-, Kommunikations- und Informationsforschung at the University of Bremen. See: https://mesoftware.org/index.php/metag/

Table 1: Participating families.

Family	Parents	SES	Religion*	Selected child (age on first visit)	Siblings
1	Mother (39, Italian) Father (43, Italian)	High		F, 5	
2	Mother (37, Italian) Father (38, Italian)	Medium		M, 4	M, 1
3	Mother (42, Italian) Father (48, Italian)	Medium/ Low	Parents are not affiliated but chose a religious school (Communion and Liberation) for their daughter	F, 3	
4	Mother (38, Russian) Father (38, Italian)	Medium		F, 4	
5	Mother (37, Belgian) Father (45, Italian)	High		F, 6	M, 3
6	Mother (43, Italian) Father (43, Italian)	Medium		M,5	
7	Mother (42, Italian-Swiss) Father (39, Italian-French)	Medium		M, 5	F, 2
8	Mother (41, Italian) Separated	Medium		M, 5	
9	Mother (41, Italian) Father (42, Italian)	High	Affiliated with Communion and Liberation Fraternity. All children attending a Fraternity's school.	M, 7	M, 18m; M, 3; M, 6; F, 10; F, 13; F, 14;
10	Mother (40, Italian) Father (44, Italian)	Medium		M, 7	
11	Mother (34, Moroccan) Father (46, Italian)	Medium/ Low		M, 6	M, 8
12	Mother (38, Italian) Separated	Medium		M, 6	F, 10
13	Mother (41, Italian) Father (49, Italian)	Low		M, 6	
14	Mother (40, Italian) Father (40, Italian)	Medium	Affiliated with Communion and Liberation Fraternity	F, 7	M, 3; F, 10; M, 12;
15	Mother (42, Italian) Father (42, Italian)	Medium/ Low		M, 6	
16	Mother (40, Italian) Divorced	Medium		M, 7	M, 5
17	Mother (37, Moldavi-an-Russian) Separated	Low		F, 8	
18	Mother (40, Italian) Father (41, Italian)	Medi-um-High		F, 8	F, 10

Table 1: (continued)

Family	Parents	SES	Religion*	Selected child (age on first visit)	Siblings
19	Mother (53, Italian) Father, (58, Italian)	High		M, 5	
20	Mother (49, Italian) Father (49, Italian)	Medium		F, 8	F, 11

* Religion is indicated only when parents made an explicit reference to their religious participation to explain their parenting cultures, parental mediation practices and media use (e. g., watching the evening prayer or listening to religious music).

and with whom (e. g. parents, siblings, nanny, grandparents) (Mascheroni and Zaffaroni, 2022). The parent responsible for filling out the diary was our contact person, usually the mother. In total, only 17 diaries were completed. Reasons for not filling out the media diaries varied from no media use to report in the selected week (Family 5), technical problems with downloading the app (Family 14), or dropout after the interview (Family 1). The diaries were discussed with families in the last and third visit in December 2022–January 2023.

Data analysis

This article reports only on the interview data from two family visits (N = 39), and the media diaries (N = 17). Interviews were transcribed and analysed using constructivist grounded theory (CGT) (Charmaz, 2014), which is an inductive, iterative and comparative methodology. In fact, CGT involves a recursive approach to data collection and analysis, whereby each round of data collection is informed by previous data collection and analysis.

In line with CGT, the research team conducted an iterative data analysis process. First, an interview transcript was coded independently by each researcher, using line-by-line coding. The resulting codes were compared to identify any discrepancies in data interpretation. Afterwards, a shared code sheet was adopted which informed the second stage of analysis, when the interviews were coded independently by researchers. The process was iterative and the shared code sheet enriched and revised until each coder was satisfied. Then, the coded transcripts were aggregated into a single shared MaxQDA file. Finally, the lead researcher examined all coded transcripts and finalised a second-level coding by revising codes and aggregating them into broader codes, summarising the main themes that emerged from interviews – including *daily*
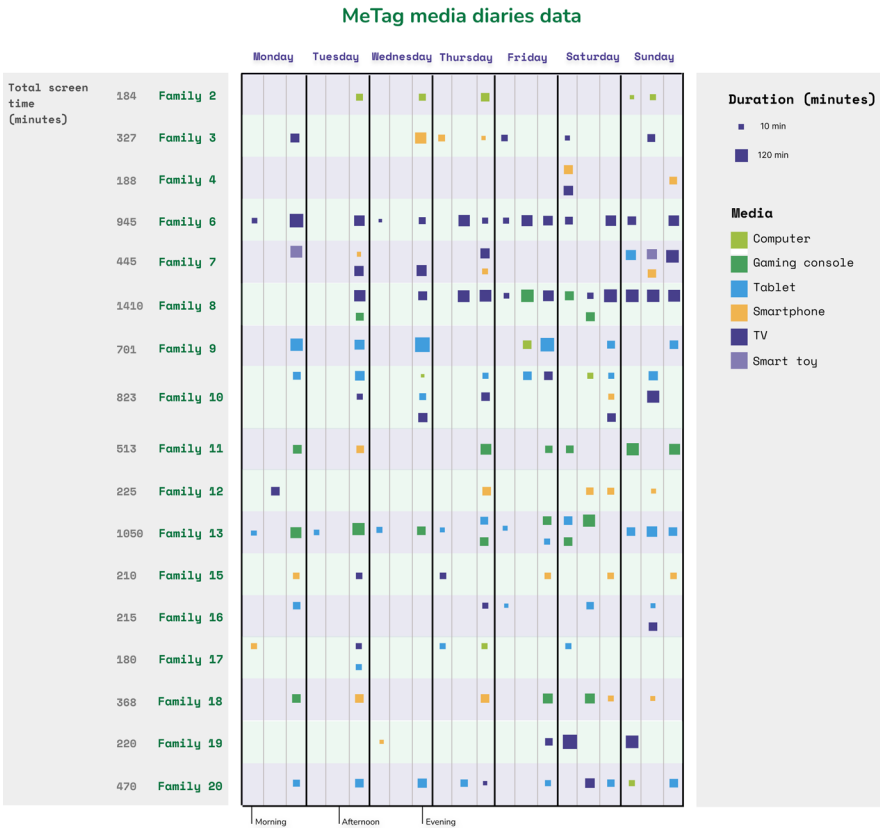
Figure 1: Media diaries.

routines, device biographies, digital skills, media ensemble, media practices, parental mediation, parenting, peer group, risks, scaffolding, school, screen time, sharenting, smart speakers, technological imaginaries, and *COVID-19 impacts*.

MeTag data were analysed by aggregating the diaries produced by each family – originally available as a spreadsheet – into a single anonymised dataset. In order to compare the results across the participating families, the data were analysed using descriptive statistics, and processed into detailed visualisations using RAWGraph and vector graphics editing software. The visualisations helped identify and compare the main patterns of media (co-)use within different families. The data and visualisations from the media diaries were interpreted and analysed in conjunction with the analysis of interviews. Data triangulation allowed researchers to situate temporal routines within the meaning-making processes and media practices taking place in each household.

4 Findings

Digital media in the everyday life of young children and their families

Digital media maintain a significant presence in the lives of young Italian children and their families. In fact, families report an average of 60 minutes of screen time on weekdays and 108 minutes on weekends. Yet, there are huge variations in the use of digital media across families: In some families children's media use is more sporadic and shorter, in others it is more regular and lengthier (Table 2). There are also a few cases where children's media use is concentrated in the weekend (Family 4), at least during the monitoring period. While the total amount and distribution of screen time varies across families and days of the week, regularities emerge in relation to the temporality of media use: During weekdays, children's media time is concentrated in the evening (Figure 1). In fact, all the participating children live busy lives, finishing school or kindergarten after 4 pm. Many also spend time outdoors, participate in after-school programmes or sport activities. Therefore, as explained by parents during the interviews, children are allowed some media time when they return home, after six pm. Occasionally, children are allowed to watch television after dinner, together with their parents (as in Family 6). Sometimes (Family 6, 8, 13) children are also allowed to watch cartoons in the morning, during or after breakfast, while parents are busy getting dressed or completing household chores.

Table 2: Average screen time per weekday in minutes.

	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.	Average weekdays	Average weekends
M	58.6	55.8	46.0	69.8	71.3	101.1	115.7	60.3	108.4
SD	48.7	49.0	52.6	60.7	81.8	82.4	103.6		
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Max	175.0	155.3	175.0	248.0	247.0	299.0	396.0		

Across families, screen time increases over the weekend. This is also when most co-viewing takes place (Figure 2). In fact, children mostly use media individually or with their siblings, but without adult supervision or parents' active engagement, during weekdays. For example, both brothers (aged 6 and 8) in Family 11 are passionate gamers and will play *Fortnite* together, each on their own Xbox console. Family 9 is a traditional religious family with seven children, with an age range
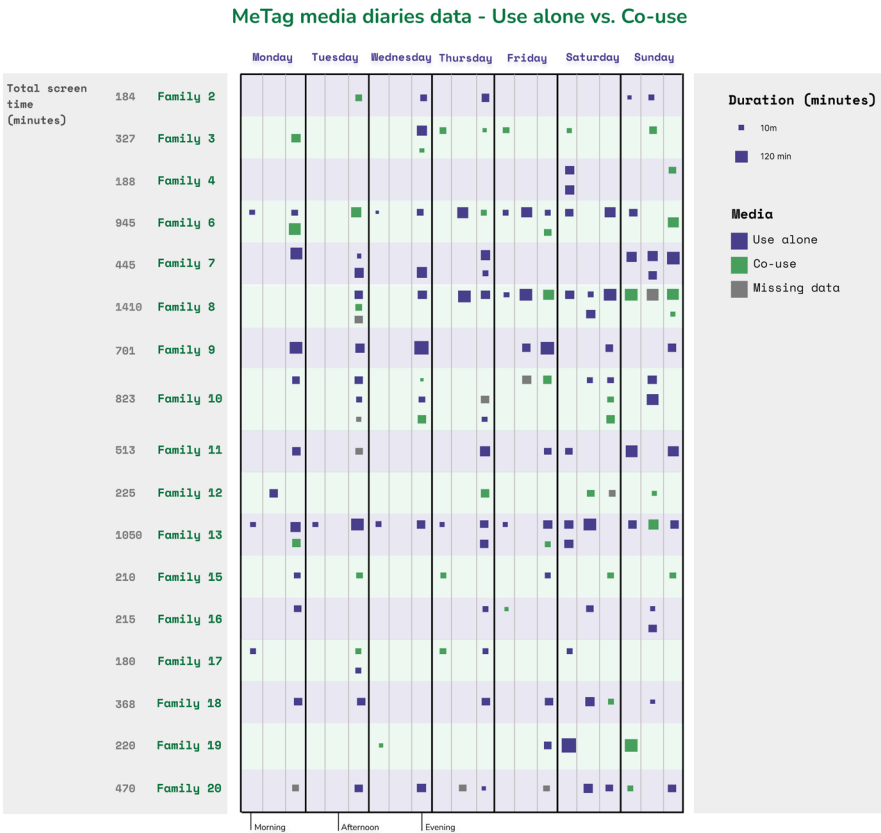
Figure 2: Individual use vs. co-use (with parents and/or siblings).

spanning from 18 months to 14 years at the time of our first visit. Except for the oldest daughter and the youngest son, the siblings are used to watching movies and cartoons together. The father explains how, for them, media time is family time for siblings to share, with the second daughter (aged 12) also having a monitoring role:

> Mirtilla [12 years old], instead, monitors her brothers because she also likes those cartoons, she is a big baby. So, yes, she helps out. One screen at the time, not like my parents who have a TV screen in every room. Here, either you watch something together or you do something else. You don't like it? Then read a book. (Severus Piton, father, Family 9)

Occasionally, the father joins them, especially on weekends and when they are watching movies for the first time, such as *Harry Potter* or *Star Wars*. At the same time, the selected child is granted more individual use (tablet) from the first and the second time visit, as reflected in Figure 2.

It comes with no surprise that family media time with parents, such as watching movies together, is usually concentrated on Friday evenings and weekends. Family 14, for example, is a family of four children of different ages – the youngest being 3 and the oldest 12. Yet, the mother recounts that, despite different tastes, they still manage to find movies that everyone likes to watch together in the weekend.

The data reported by parents in the app-based media diary do not show a linear association between co-use and increased children's screen time, as documented instead in most survey-based studies (Elias and Sulkin, 2017). Rather, the child who displays more regular and lengthier screen time exposure (Family 13) uses media almost exclusively on his own:

> It is mainly individual, he plays a little with his dad, or with me, especially when we first bought him a Nintendo Switch, we used to play *Mario Bros* or *Mario Kart* together, so, yes, we have been using it together … But then, now it's been over a month, yes, a month more or less, that [it's] only been *Minecraft*. Sometimes his dad plays it, or they play a cooking game together. But mainly on his own. When friends visit, he shows them *Minecraft*, yes. (Pamela, mother, Family 13)

Additionally, children's screen time is not higher than average in single-parent families (families 8, 12, 16, 17), except for Family 8, where indeed screen time – with father and son playing videogames together even after dinner – was reported by the mother as a major source of conflict with her ex-husband.

Whereas MeTag data show a significant amount of daily media time in certain families, during the interviews parents tended to minimise the role of media in their children's and their own daily lives, emphasising, by contrast, the wide variety of outdoor activities their children do, as the following excerpt shows. Both parents in Family 11 agree that their children have little time for *Fortnite*:

> During the week they go to school, from Monday to Friday. They come back, on Monday and Tuesday they even come home at 7 pm, because they practise sports in the afternoon. So it is really three afternoons, Wednesday, Thursday and Friday that, once back home, they have time to play. On Saturdays and Sundays we try to spend time outdoors, so it's really only three afternoons. (Malika, mother, Family 11)

The emphasis on allowing little media time during weekdays signals that screen time is a source of anxiety and concern for many, as we shall see later; or, at least, that parents are aware of the social construction of screen time as a signifier of "good parenting."

Defining and avoiding "excessive" screen time

Since it is hard for parents to pin down and quantify the exact amount of viewing or playing time their children are allowed, definitions of "appropriate" screen time for children are typically implicit and made by comparison with what is perceived as "excessive" exposure to screen. The comparison is mostly made with the 2020 lockdowns, acknowledged by all our interviewees as an exceptional circumstance, under which all habitual practices and norms were radically disrupted. No surprise, then, that even in most restrictive families where children are only occasionally allowed screen time, their viewing time increased and became more regular when both parents were working from home and no childcare was available:

> Their normal routine was disrupted, as there were no more pre-school or extracurricular activities, so the 8, 9, 10 hours usually spent in between school/playground/swimming pool needed to be filled in. So, they have done a lot of alternative activities, but an hour or so of watching TV each day was part of her daily routine. (Carlo, father, Family 5)

Similarly, families who had never been particularly restrictive, acknowledge the disruption of prior daily routines during the lockdown as a turning point, after which their child's media use became more intense, although now more regulated:

> Nicola (father, Family 6): You know the half an hour, an hour per day limitation? We've never had that. But then [during the lockdown] any potential barrier fell down …
> Gabriella (mother, Family 6): Because, you know, we both had to work and he was often in front of TV.
> Nicola: Yes, he was at home, and we often had Zoom meetings at the same time. All three of us were at home: one in the bedroom, the other here [kitchen] or there [the living room] and so if he could not play alone in his room, he was here with us and one had to give him something and TV was fully legitimised. Not that I have ever been particularly concerned but … we haven't really decided, it just happened. And then we maintained it [screen time] with some limitations.

In our conversations with parents, screen time always emerged as a focus of parental attention, if not concern. As the excerpt above shows, even parents who do not share anxieties about the harmful effects of screen time, are seemingly aware of the social discourses around limiting exposure to screens as a sign of responsible parenting. Other families show a more profound appropriation of the social discourses around screen time. The reason for their closer adherence to the tropes and prescriptions of screen time discourses, exemplified by their mastery of the medical language, lies in personal experiences – with their young children experiencing withdrawal in front of screens, or emotional distress and temper tantrums when deprived of screens – or in the advice received from peer contacts and expert

knowledge, or, more often, a combination of the two. For example, Letizia (Family 8) introduced the smartphone to Ludovico when he was a toddler, to keep him calm watching nursery rhymes while on the changing mat. However, she soon realised that the boy was distressed whenever she put an end to his watching time. Since then, she has "always avoided to socialise him to iPads, computers, smartphones and stuff, because of how upset he was." For Filippo and Ludmilla (Family 4), parents of Olivia (4 years old), it was a combination of first-hand experience and expert advice. Indeed, during the first interview they recounted how they resolved to forbid the use of the tablet after her violent emotional reactions when she was told it was time to stop:

> Ludmilla (mother, Family 4): There was a period when she started using the iPad on a regular basis, I mean, we are used to watching cartoons and we now watch them on TV only, but before we alternated the TV and the iPad. But we decided to rule out the iPad, because she watched it for an hour, but it was never enough, "Olivia, stop now!", "No, more." She watched it for half an hour … "No, more!", two hours, and then she flipped out, yelling. So I said, since the more you watch it the more you get hysterical, we will erase it altogether. So we have completely ruled it out. Punishment, no more iPad …
> Filippo (father, Family 4): She was ostensibly upset …
> Ludmilla: Yes, really upset, it was hard to take it away.
> Filippo: I remember we have also read a piece on *Internazionale* [weekly current affairs magazine] that advised us on such issues.

Later on during the interview, Ludmilla found the article her husband was referring to, which she had shared on her Facebook profile, and proudly announced to the researchers that it was entitled "How harmful to children is screen time." Along the same line, Camilla, Alessandro's (5 years old, Family 19) mother, recounted being informed about the harmful neural effects of screen time when the family was on holiday in Sicily and she used her smartphone as a pacifier to keep her active child safe from cars:

> Camilla (mother, Family 19): Alessandro could not help moving around, so I was anxious – first because he barely ate and then, especially, because there were cars all around the place. So at some point, given that I am not young anymore, I thought "I am going to have an heart attack unless I keep him seated at the table." So I handed him my phone. "Are you insane?" this acquaintance told me, "the phone works on the same receptors as cocaine, it's like drugs, it is poison, it triggers reactions," and I trusted him …
> Interviewer: Was he a physician?
> Camilla: No, no … but his ex-wife was a developmental psychologist, so it was probably true. At that moment I replied, "Look, I'd rather keep him here than fearing he will be injured by a car." But then I started to note his violent reactions when you take the phone away, and thought, "it must have been true." And now after 20 minutes I'll take the phone away.

Conversely, Caterina, Rubina's mother (8 years old, Family 17), has never experienced any "excessive screen time" effects on her daughter, but was influenced by social discourses. In fact, she told the interviewers how she has always kept the television on, as a background noise, on the advice of physicians to assist her daughter's recovery from a small auditory impairment at birth. Accordingly, she had developed a positive attitude towards screen media. Yet, when Rubina was in her first year in kindergarten (aged 3), Caterina was scared by the pre-school educators who warned her about the risks of withdrawal, with "children always with the phone in their hands, no longer able to have a grip on reality." Hence, when the tablet eventually broke, she never replaced it, until Rubina, then already in primary school, needed a personal device to participate in remote learning activities during lockdowns.

As these families' experiences show, the "screen time" discourse is not only a normative device, that comes with a set of moral judgements and social stigma, through which parents are encouraged to conform to the "good parent" ideal. Screen time is also a performative tool, which provides parents with practical advice, a list of ready-made "best practices" on how to regulate children's exposure to screen media. In fact, when restrictions to media use are applied, these are primarily directed at limiting screen time, and, secondarily, at limiting access to perceived inappropriate content – violent, aggressive behaviour for example. Common strategies to reduce screen time involve the use of an egg timer (Family 4), or a wall clock (whereby the child shall stop when the longer hand reaches a certain hour, as in Family 7 and 10), or parental controls and screen time settings that restrict internet access on the smartphone to certain time intervals (for teenage sisters in Family 9) or limit the length of use of certain apps (Family 20); families report also using the number of episodes of a children's TV series as a strategy to limit screen time (for example children in Family 14 report being allowed to watch two episodes of *Gormiti* before dinner). It is also common to define certain time slots as media-free: typically after dinner or before going to school. Interestingly, indeed, when parents report applying little time restrictions to their children's media use, they rather turn to restricting content that favours prolonged exposure to screens. Restricting content, then, becomes an indirect way to restrict time, as Giovanni's father, Aldo (Family 10) suggests when he talks about what he dislikes about YouTube:

> YouTube is practically like television … As soon as you finish watching something a new video starts, and then another one … and it is YouTube that decides what you're going to watch. You have the illusion of choice, but you are offered the same content over and over again, so you watch rubbish and, next, something even more stupid. And you end up watching nonsense videos for two consecutive hours, where nothing happens really. And I don't like it, I don't like him being hypnotised for two hours in front of nothing. (Aldo, father, Family 10)

A further strategy to limit screen time is to provide children with a busy schedule of outdoor, sport, and creative activities. For example, after COVID-19 restrictions ended, Family 5 returned to their usual routine of sporadic screen time and little access to digital media:

> The easiest rule is to avoid having any devices, that is the rule that nips the problem in the bud [laughing] … Filling their time with alternative activities is another strategy that works. Then, it happens, I am not saying they are completely … (Carlo, father, Family 5)

However, restricting screen time is challenging, because strict rules clash with parents' parenting cultures, technological imaginaries, and, last but not least, with their busy daily schedules, as we shall discuss next.

Balancing the convenience of digital media and anxieties around excessive screen time

Parents in our study report engaging in "screen-assisted parenting" practices (Elias and Sulkin, 2019), including using media as digital babysitters or digital pacifiers, or as rewards/punishment for the child's behaviour. Parents discuss the same motivations for turning to media as digital babysitters or pacifiers that have already been identified by studies adopting a Uses and Gratifications approach (Bar Lev et al., 2018; Beyens and Eggermont, 2014; Elias and Sulkin, 2019), namely, keeping the child occupied during work or meal preparation, calming them down when annoyed or bored, using screens to facilitate mealtimes. In most families, for example, children are allowed some viewing time before dinner, so that parents can get on with cooking and setting the table, as the following excerpts show:

> We get home, take a shower, wear pyjamas and then they watch TV while I prepare [dinner]. This is our routine. Then, the rule is that the TV must be turned off while we eat. (Alice, mother, Family 16)

> Aldo (father, Family 10): When are you allowed to watch TV, Giovanni? Tell the researchers yourself.
> Giovanni (7 years old): Dunno …
> Aldo: […] When mum or dad are?
> Giovanni: Working?
> Aldo: Noo!
> Lisa (mother): Cooking!

Parents also recount using mobile media as digital pacifiers, to keep children quiet in public places such as restaurants, and potentially distressing situations such

as standing in a queue. However, parents express more reservations about using screen time to keep their children quiet, describing it as a "last resort." The following excerpts suggest parents feel guilty and inadequate for turning to screen-assisted practices outside of the home:

> Yes, when we are out it may happen that he asks for my smartphone, but only if we are in a situation that is extremely boring for him. Dunno, if we are standing in the queue at the bank, for example, he would ask for it. But it doesn't happen very often because I tend to avoid situations where he is put on hold, because it is tremendously stressful. (Pamela, mother, Family 13)

> I try to set limits, because we have realised that within 20 minutes, if he uses it too much, then when you take it away he gets mad. The smartphone is really the last … resort. It happens, when we go at a restaurant for example. (Camilla, mother, Family 19)

Screen time rules, on the other side, are also employed as a motivational reward or, more often, punishment. Many parents confessed "threatening" their children to confiscate tablets and smartphones, as Pamela (mother, Family 13) described it, in order to maintain discipline. And Pamela adds that "using threats is an awful childrearing strategy," demonstrating awareness of the discrepancy between ideal and actual parenting practices. Sara (Family 18), mother of Eva (8) and Beatrice (10), admits that "the first punishment I give is no more screens, television, tablet, etc." However, not only using screen time as a reward or punishment is dissonant with respect to the "good parenting" discourses; it has its own costs, and it is often counterproductive, as Maria, mother of two children aged 5 and 2, explains:

> It is not really the reward and punishment … it is that sometimes – wrongly I must say, and this is why he later picks this same trick to blackmail us – "If you do not eat dinner, I will turn the TV off," "If you don't … I won't let you use the tablet later," such things. Because eventually … he does the same thing. "I won't eat unless you let me watch TV." (Maria, mother, Family, 7)

As the last excerpts suggest, parents do not take screen-assisted parenting practices lightly: Feelings of guilt and inadequacy for failing to conform to more socially legitimised parental mediation practices, and a great deal of uncertainty about the effectiveness and problematic consequences of using digital media as babysitters, pacifiers or punishment dominate their accounts. Research within the Uses and Gratifications framework has argued that, in order to avoid the dissonance between screen time anxieties and everyday life realities, parents develop more positive attitudes towards screen media (Bar Lev et al., 2018). In our sample we have not observed such a linear relationship between practices and attitudes. Rather, parents, especially mothers, refer to broader social and cultural changes, pointing to how childhood has become mediatised, how they struggle to balance work and family life, and have to squeeze childrearing in between a variety of

conflicting commitments. Serena (mother, Family 15) and her husband both work in a call centre, but she still works from home a couple of days a week. She emphasises the force of habit in turning to television (actually YouTube videos) as a digital babysitter:

> Compared to my generation, nowadays children are much more into technology. Perhaps it is also our mistake, that whenever we have something else to do, we place him in front of television. We have always done it. (Serena, mother, Family 15)

Camilla, a part-time worker from a wealthy family (Family 19), has often relied on screen-assisted parenting, especially to facilitate mealtimes. She recounts how the TV in the living rooms is turned on during family meals, so that her son can move "back and forth" and eat at least a little food. Overall, she adopts a pragmatic approach to her son's media use, which rests upon her confidence that providing alternative stimulating experiences would compensate for screen time. Notwithstanding her son's temper tantrums when he was younger, she minimises the potentially harmful effects of exposure to screens, thanks to the cultural, social and economic resources she can mobilise to counter potential screen time negative effects:

> Yes but truth is … television is a great babysitter, so occasionally … I work a part-time job, but I have a lot of other things to do to manage the household. Before, I also took care of my mother, so I managed her administration, and then, when you have to reply to work emails, and stuff, television is helpful … So I tend to believe that if he turns out smart he will be smart even if he watches TV, if he is dumb he is dumb anyway, don't you agree? (Camilla, mother, Family 19)

5 Discussion and conclusions

In this article we have discussed the findings of two waves of interview data and digital media diaries, that refer to the temporality of media use by children aged eight or younger. The findings show how media time cannot be separated by the normative and performative discourse on "screen time." Indeed, whenever parents reflect on the temporal incorporation of digital media in their children's lives, social discourses about what makes an acceptable amount of screen time and what, conversely, should be considered "excessive," are mobilised, with references to expert advice. Since the screen time discourse is highly prescriptive and morally charged, it was not surprising to find discrepancies between what parents would describe as their family's approach to regulate media use in the home, on the one hand, and the actual viewing practices of children, as well as screen-assisted parenting practices, on the other hand. Such tensions generate feelings of guilt, inadequacy,

and frustration for failing to conform to the "good parent" ideal. However, differences emerged across families, based on parents' educational level and occupation, their technological imaginaries, and their own media use: higher-educated parents employed as professionals tend to feel less anxious about children's screen time, because they are generally more confident in their own skills and resources to both counter the negative effects of screen time or compensate for their child's lack of digital skills due to digital deprivation.

Moreover, anxieties about the harmful effects of excessive exposure to screens do not translate automatically in more restrictive parental mediation and an effective reduction of the time children spend in front of screens, even when parents perceive their own children as at risk of addiction. In fact, consistent with prior research adopting a Uses and Gratifications framework, we found that parents engage in screen-assisted parenting practices to manage their complex everyday life schedules: Digital media are employed as babysitters, pacifiers, or punishment to keep children quiet during dinner preparation, calm them down in distressing or boring situations, facilitate mealtimes, and regulate their behaviour. Uses and Gratifications research interprets the dissonance between actual screen-assisted parenting and parental concerns about excessive screen time through the idea of parents satisfying their own needs (through children's screen time) (Beyens and Eggermont, 2014; Elias and Sulkin, 2019), and changing their attitudes towards media so as to legitimate their use (Bar Lev et al., 2018). Our findings reflect a more complex picture: The choice to turn to media as babysitter, pacifier or punishment is often far from rational, beyond deliberate, and based on habit. The choice of allowing children's screen time also provides regularity in families' daily schedules (e. g., as watching TV before dinner). Additionally, parents acknowledge that screen media are now an inevitable part of children's daily lives, thus difficult to ban altogether – they refer to watching specific content or playing certain videogames as important tokens for their children's participation in the peer group. In so doing, and although negotiations around screen time are typically asymmetrical due to the young age of the children involved, parents acknowledge children's rights to access digital media as a precondition for their social inclusion. This is the middle-class ethos that, according to Livingstone and Blum-Ross (2020), now pervades also poorer families. The "effortful provision" (Livingstone and Blum-Ross, 2020, p. 83) of, often second-hand, digital media to advantage their children's future can be observed among more disadvantaged families.

This is where the domestication of technology approach can be helpful, for it reminds us that the role of media in families' everyday life cannot be fully understood unless it is contextualised within the broader contexts of media change, childhood changes, and parenthood changes. If we acknowledge that childhood and parenting are mediatised, and that the burden of ensuring children's participation,

protection and provision is mostly placed on parents, then the paradox of screen time ceases to be a matter of personal challenges every family deals with (or not), and can be assumed as a critical site for negotiations and conflicts between the private and the public: between the contradictory social discourses that position digital media as both a solution and a threat, and families' own value systems; and between conflicting societal pressures and emergent risks, that radically reconfigure the meanings and doings of family (Livingstone and Blum-Ross, 2020). Domestication scholars, in fact, have looked at media as "the means (the media) whereby public and private meanings are mutually negotiated; as well as being the products themselves (through consumption) of such negotiations of meaning" (Silverstone et al., 1992, p. 28). Moreover, bringing to the fore families' diversity – how their education, cultural background, religious affiliation, and occupation shape their parental mediation practices – and accounting for the specificity of different contexts of media use, complicates homogenous, normative, definitions of screen time and its resulting policy guidelines. It is on this basis that we argue for a shift, from "screen time" to "screen times."

References

Bar Lev, Y., Elias, N., & Levy, S.T. (2018). Development of infants' media habits in the age of digital parenting. A longitudinal study of Jonathan, from the age of 6 to 27 months. In G. Mascheroni, C. Ponte, & A. Jorge (Eds.), *Digital parenting. The challenges for families in the digital age* (pp. 103–112). Nordicom.

Beyens, I., & Eggermont, S. (2014). Putting young children in front of the television: Antecedents and outcomes of parents' use of television as a babysitter. *Communication Quarterly, 64*, 57–74. https://doi.org/10.1080/01463373.2013.860904

Beyens, I., & Eggermont, S. (2015). Understanding children's television exposure from a life logistics perspective: A longitudinal study of the association between mothers' working hours and young children's television time. *Communication Research, 44*, 691–716. https://doi.org/10.1177/0093650215607600

Beyens, I., Valkenburg, P. M., & Piotrowski, J. T. (2018). Screen media use and ADHD-related behaviors: Four decades of research. *Proceedings of the National Academy of Sciences, 115*(40), 9875–9881. https://doi.org/10.1073/pnas.1611611114

Blum-Ross, A., & Livingstone, S. (2018). The trouble with "screen time" rules. In G. Mascheroni, C. Ponte, & A. Jorge (Eds.), *Digital parenting. The challenges for families in the digital age* (pp. 179–187). Nordicom.

Charmaz, K. (2014). *Constructing grounded theory: A practical guide through qualitative analysis* (2nd ed.). Sage.

Cingel, D. P., & Krcmar, M. (2013). Predicting media use in very young children: The role of demographics and parent attitudes. *Communication Studies, 64*, 374–394. https://doi.org/10.1080/10510974.2013.770408

Clark, L. (2013). *The parent app: Understanding families in the digital age*. Oxford University Press.

Elias, N., & Sulkin, I. (2017). YouTube viewers in diapers: An exploration of factors associated with amount of toddlers' online viewing. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 11*(3), Article 2. https://doi.org/10.5817/CP2017-3-2

Elias, N., & Sulkin, I. (2019). Screen-assisted parenting: The relationship between toddlers' screen time and parents' use of media as a parenting tool. *Journal of Family Issues, 40*(18), 2801–2822. https://doi.org/10.1177/0192513X19864983

Haddon, L. (2011). Domestication analysis, objects of study, and the centrality of technologies in everyday life. *Canadian Journal of Communication, 36*(2), 311–323. https://doi.org/10.22230/cjc.2011v36n2a2322

Haddon, L., & Holloway, D. (2018). Parental evaluations of young children's touchscreen technologies. In G. Mascheroni, C. Ponte, & A. Jorge (Eds.), *Digital parenting. The challenges for families in the digital age* (pp. 113–123). Nordicom.

Holloway, D., Green, L., & Livingstone, S. (2013). *Zero to eight. Young children and their internet use*. LSE, London: EU Kids Online. http://eprints.lse.ac.uk/id/eprint/52630

Holloway, D., Green, L., & Love, C. (2014). "It's all about the apps": Parental mediation of their preschoolers' digital lives. *Media International Australia*, 153(1), 148–156. https://doi.org/10.1177/1329878x1415300117

Hoover, S. M., & Clark, L. S. (2008). Children and media in the context of the home and family. In K. Drotner & S. Livingstone (Eds.), *The international handbook of children, media and culture* (pp. 105–120). Sage.

Jordan, A. B. (2004). The role of media in children's development: An ecological perspective. *Journal of Developmental & Behavioral Pediatrics, 25*, 196–206. https://doi.org/10.1097/00004703-200406000-00009

Lim, S. S. (2019). *Transcendent parenting: Raising children in the digital age*. Oxford University Press.

Livingstone, S., & Blum-Ross, A. (2020). *Parenting for a digital future: How hopes and fears about technology shape children's lives*. Oxford University Press.

Livingstone, S., Mascheroni, G., Dreier, M., Chaudron, S., & Lagae, K. (2015). *How parents of young children manage digital devices at home: The role of income, education and parental style*. EU Kids Online. http://eprints.lse.ac.uk/id/eprint/63378

Livingstone, S., Ólafsson, K., Helsper, E. J., Lupiáñez-Villanueva, F., Veltri, G. A., & Folkvord, F. (2017). Maximizing opportunities and minimizing risks for children online: The role of digital skills in emerging strategies of parental mediation. *Journal of Communication, 67*(1), 82–105. https://doi.org/10.1111/jcom.12277

Mascheroni, G., & Zaffaroni, L. G. (2022). MeTag App and MeTag Analyze. *M&K Medien & Kommunikationswissenschaft, 70*(3), 292–302. https://doi.org/10.5771/1615-634X-2022-3-292

Nikken, P. (2022). The touch-screen generation: Trends in Dutch parents' perceptions of young children's media use from 2012–2018. *Communications, 47*(2), 286–306. https://doi.org/10.1515/commun-2020-0028

Plowman, L., & Stevenson, O. (2013). Exploring the quotidian in young children's lives at home. *Home Cultures, 10*(3), 329–348. https://doi.org/10.2752/175174213X13739735973381

Przybylski, A. K. (2019). Digital screen time and pediatric sleep: Evidence from a preregistered cohort study. *The Journal of Pediatrics, 205*, 218–223. https://doi.org/10.1016/j.jpeds.2018.09.054

Rideout, V. (2017). *The Common Sense Census: Media use by kids age zero to eight*. Common Sense Media. https://www.commonsensemedia.org/research/the-common-sense-census-media-use-by-kids-age-zero-to-eight-2017

Scannell, P. (1996). *Radio, television, and modern life: A phenomenological approach*. Blackwell.

Silverstone, R., Hirsch, E., & Morley, D. (1992). Information and communication technologies and the moral economy of the household. In R. Silverstone & E. Hirsch (Eds.), *Consuming technologies: Media and information in domestic spaces* (pp. 15–31). Routledge.

Tandon, P. S., Zhou, C., Sallis, J. F., Cain, K. L., Frank, L. D., & Saelens, B. E. (2012). Home environment relationships with children's physical activity, sedentary time, and screen time by socioeconomic status. *International Journal of Behavioral Nutrition and Physical Activity*, *9*(88), 1–9. https://doi.org/10.1186/1479-5868-9-88

Valkenburg, P. M. (2004). *Children's responses to the screen: A media psychological approach.* Routledge.

Watson, A., Lupton, D., & Michael, M. (2022). The presence and perceptibility of personal digital data: findings from a participant map drawing method. *Visual Studies*. https://doi.org/10.1080/1472586X.2022.2043774