Responsible parents on guard: Exploring domestication and responsibilisation in parents' lived experiences with baby monitoring technologies

Julie Dereymaeker

Corresponding author:

Julie Dereymaeker, Department of Communication Sciences, Faculty of Political and Social Sciences, Ghent University, Miriam Makebaplein 1, 9000 Ghent, Belgium.

Email: Julie.Dereymaeker@UGent.be

Article published in New Media & Society.

Please refer to this article as:

This chapter is published in New Media & Society. Reference: Dereymaeker, J. (2025). Responsible parents on guard: Exploring domestication and responsibilisation in parents' lived experiences with baby monitoring technologies. *New Media & Society, 0*(0), 1-18. https://doi.org/10.1177/14614448251380678.

Abstract

Baby monitoring technologies (BMTs) are increasingly sophisticated and marketed as essential tools for responsible parenting, reinforcing expectations of constant vigilance and care. This study investigates how parents domesticate BMTs and how responsibilisation manifests in this process. The study draws on in-depth interviews with 15 Flemish families and employs constructivist grounded theory analysis. Findings show this domestication is an agentic negotiation where parents balance elements of reassurance, autonomy, rationality, peace of mind, cost considerations and the ideal of letting go. This negotiation, however, is framed by a process of moral responsibilisation which manifests through three distinct but interconnected pathways: the self-guided, social and technologically imposed pathways. This process challenges the delegation of care to trusted caregivers and calls for a critical assessment of the expansion of monitoring technologies. As these technologies enable parental omnipresence, the choice *not* to monitor one's child may shift from a personal decision to a political act.

Keywords*:* Baby monitoring technology, domestication, intimate surveillance, qualitative research, responsibilisation

1. Introduction

The phrase "What to expect when you're expecting", widely recognised as the title of a popular pregnancy guidebook and later adapted into a 2012 comedy film, encapsulates the profound uncertainties experienced by many first-time parents. Although feelings of uncertainty are timeless, the tools promoted to ease them, including baby monitoring technologies (BMTs), are continually evolving. A key development is the integration of sensors and artificial intelligence (AI) in BMTs. For instance, audio and video baby monitors are enhanced with motion and sound sensors, and more recently, AI algorithms have been integrated to interpret the child's crying and advise parents on the child's needs (Cappella, 2023). These tools include sensor technologies such as sensor mats that parents can place beneath their child's mattress. Sensor mats monitor infants' movement and breathing and can gently stimulate movement if the infant's breathing is irregular or paused (Hasan and Negulescu, 2020). Similarly, baby monitoring wearables with healthcare functions have moved beyond the confines of the hospital and have entered the mass market. The Owlet, for example, is a wearable that monitors infants' heart rate and oxygen levels during sleep (Holloway et al., 2020). These sensor technologies are often marketed as preventive tools against sudden infant death syndrome (SIDS), as they issue alerts when an infant's vital signs exceed certain thresholds. SIDS refers to the sudden and unexplained death of an otherwise healthy infant, typically occurring during sleep (Kinney and Thach, 2009). BMTs are also increasingly paired with apps that send realtime notifications and even alarms directly to parents' smartphone (Wang et al., 2017). This allows parents to maintain a virtual presence and monitor their child at any time. While these functionalities are often presented as empowering and can contribute to parents' peace of mind (Hasan and Stannard, 2022), they can also generate additional stress and expectations (Wang et al., 2017). More specifically, these functionalities enable and foreseeably extend what Leaver (2015) terms *intimate surveillance*, defined as the "purposeful and routinely well-intentioned surveillance of young people by their parents" (p. 153). Intimate surveillance is increasingly normalised as a form of responsible parental care (Leaver, 2017). This seems to reflect a process of responsibilisation – the delegation of responsibilities on to the individual (Wakefield and Fleming, 2009). Historically, parents have been responsible for childcare, but the scope and intensity of parental responsibilities continue to expand. Parents – particularly mothers – are expected to actively ensure their child's safety and well-being through vigilant monitoring (Lupton, 2020; Lupton and Williamson, 2017; Pangrazio et al., 2025). While the field has conceptually discussed responsibilisation regarding BMTs, and surveillance

technology more generally, parents' everyday practices and how responsibilisation manifests in parents' everyday use of monitoring technologies are often overlooked. Therefore, this study examines parents' domestication of BMTs and how responsibilisation manifests within this process.

2. Theoretical framework

2.1. Domestication theory and the ambivalence of baby monitoring

Technologies have come to play an important role in parenting, and the remote monitoring of infants has become commonplace (Wang et al., 2017). Domestication theory offers a framework to examine how BMTs are actively shaped, negotiated and integrated or resisted within the home. As developed by Silverstone et al. (1992), domestication theory describes how media and technology become embedded into daily life through a process of appropriation, objectification, incorporation and conversion. Respectively, these processes describe the management of technologies entering the home, their physical and symbolic location in the home, how they fit in users' routines and the display to others, which sends out a message about the user (Haddon, 2007). The theory emphasises the symbolic and social aspects of technology use, highlighting how users negotiate meanings and norms, and ultimately "tame" technology to align with their lifestyles and values (Haddon, 2007; Silverstone, 2005; Silverstone et al., 1992). This taming is an ongoing process, and can enter change-intensive phases of re-domestication, where a technology's role is fundamentally renegotiated, often triggered by significant life changes such as parenthood (Peil and Röser, 2023).

Empirical attention to BMT domestication remains limited. While existing research has studied pregnancy and parenting apps (e.g. Barassi, 2017; Lupton, 2020), infant feeding apps (e.g. Pangrazio et al., 2025), baby monitors (e.g. Nelson, 2008) and baby wearables (e.g. Dangerfield et al., 2017; Wang et al., 2017), these studies often do not explicitly engage with domestication theory. Wang et al. (2017) notably provided six mothers with an Owlet baby wearable for 2 weeks and examined their adoption and use. Despite not explicitly engaging domestication theory, this body of work on BMTs collectively contributes to a critical understanding of how baby monitoring can both empower and burden parents.

There are several reasons why BMTs may be considered empowering. First, BMTs are often presented and experienced as tools that alleviate parental anxiety (Dangerfield et al., 2017; Hasan and Stannard, 2022; Nelson, 2008; Pangrazio et al., 2025). While a history of

SIDS and other medical conditions motivate parents to use baby wearables, being a first-time parent and looking for peace of mind are prominent and broadly prevalent motivations (Dangerfield et al., 2017; Wang et al., 2017). Second, BMTs provide parents with otherwise inaccessible knowledge on their babies (Wang et al., 2017). Lupton (2020) refers to this data gathering as "caring dataveillance", tying it to mothers' caregiving practices. The information obtained through BMTs enables hypothesis testing about their baby, enhancing parents' instinctive understanding of their newborn (Wang et al., 2017). Third, BMTs offer flexibility in caregiving, for instance, allowing parents more freedom of movement around the house (Nelson, 2008). Finally, customisable device settings allow parents to switch off sounds during sleep training or increase volume when the baby sleeps in a separate room (Nelson, 2008). Conversely, BMTs can also extend and intensify anxieties (Nelson, 2008; Wang et al., 2017). Nelson (2008) argues that anxiety is naturalised as an everyday condition of parenting, especially first-time parenting, prompting attentive monitoring. Wang et al. (2017) demonstrated how the Owlet aggravated anxiety despite offering a perception of security. Moreover, advanced BMTs can heighten parental attentiveness to every sound and breath, potentially increasing anxiety when the technology is unavailable (Nelson, 2008).

These studies illustrate that BMTs are not neutral tools, but can modify or even disrupt aspects of parenting (Wang et al., 2017). Their domestication also involves a negotiation with established norms (Silverstone et al., 1992). For BMTs, these norms link to their presentation as empowering tools that express a responsible parental choice (e.g. Leaver, 2017; Lupton and Thomas, 2015). To further unpack these norms, I now turn to responsibilisation.

2.2. Responsibilisation

Responsibilisation refers to the delegation of responsibilities on to the individual. As defined by Wakefield and Fleming (2009), responsibilisation is a process "whereby subjects are rendered individually responsible for a task which would previously have been the duty of another or would not have been recognized as responsibility at all (p. 276)". Generally linked to neoliberalism, responsibilisation emphasises that citizens are expected to take care of themselves rather than rely on state-provided direct services (Cradock, 2004). Citizens' self-management equates with their risk management, fostering the development of a prudential subjectivity (Cradock, 2004). As children are too young to exercise prudential subjectivity, parents are expected to manage their children's risks, a concept Johnson (2014) terms "being-for-intimate-others". This responsibilisation is gendered, intersecting with ideals on motherhood, such as "intensive mothering", which expects mothers to be primary caregivers

dedicating immense energy, money, and time to their child's upbringing (Ennis, 2014; Hays, 1996).

Lupton (2013) argues that within contemporary Western societies, "as part of this move towards "intensive parenting", children in general are conceptualized as vulnerable, requiring the utmost love and attention from their parents and continual monitoring to ensure that they are happy and healthy and developing normally" (p. 45). Infants are particularly understood as being "fragile", "helpless" and "needy" (Lupton, 2013; Nelson, 2008). Such notions, combined with ideals on motherhood, spur mothers to closely surveil their infant for signs of illness, distress or sub-normal development (Beck and Beck- Gernsheim, 1995; Lupton, 2013; Nelson, 2008). As such, mothers bear a heavy burden of responsibility over their baby's health (Lupton, 2013). This clearly attests that responsibilisation concerns moral rather than causal responsibility. Moral responsibility indicates that "the role an agent played in bringing about a consequence means that they are worthy of a particular kind of reaction, such as praise or blame" (Brown et al., 2019: 115). Yet, agents are often assigned moral praise or blame for actions or consequences beyond their control, a phenomenon termed "moral luck" (Williams, 1981).

While BMTs want to mitigate risks for children, they also commercialise risks to sell their products, thereby reinforcing the image of vulnerable children and protective, responsible parents. Holloway et al. (2020) conducted a critical discourse analysis on the advertisements of wearable baby monitors and found five main discourses. Across all advertisements, they found a risk and responsibilisation discourse depicting anxious parents, concerned about their babies' health. Within this discourse, parents are deemed responsible for their babies' welfare. As such, using baby wearables is presented as the "normal" and "right" way to care for babies at risk during sleep. They also identified a medical discourse, alluding to technologies used in hospitals. Their findings further revealed a gendered, heteronormative discourse, framing women as primarily accountable for their babies' well-being and health. Finally, an I-pistemology discourse highlighted peer experiences and the promise of personalised knowledge about babies. The pervasive risk and responsibilisation discourse in advertisements propagates a normative understanding that parents are solely responsible for their baby's health. This discourse encourages a normative understanding of parenthood, equating responsible and successful caregiving with the use of baby monitoring wearables.

2.3. The current study

While BMTs have been researched in relation to parenting practices and anxiety, studies exploring parents' lived experiences with BMTs remain limited. Parents' domestication of BMTs remains largely unexplored, and research primarily discusses responsibilisation conceptually as a pressure or expectation, rather than examining its manifestation in parents' everyday lives with BMTs. Therefore, this study investigates parents' lived experiences with BMTs to explore both domestication and responsibilisation. To this end, the study addresses two research questions:

> ***Research Question 1***. What decision-making processes do parents make in their domestication of BMTs?
>
> ***Research Question 2***. How does responsibilisation manifest in parents' domestication of BMTs?

3. Methods

3.1. Study context and participants

This study is based on in-depth interviews with 15 families in Flanders, Belgium to examine (1) parents' domestication of BMTs and (2) responsibilisation. This study is part of a broader ethnography on intimate surveillance in Flemish households, which includes research with parents, children, civil society organisations and technology developers. Ethnographic research employs long-term data collection in natural settings to develop a holistic understanding of the meanings people attribute to their culture (Hammersley, 2018). As a result, the researcher and participants construct a mutual understanding of the studied phenomenon (Herzfeld, 2014).

This study zooms in on early parenthood, broadly conceptualised here as parents' experiences from pregnancy through the early years of the child's life. The core data are in-depth interviews with 17 parents of young children (aged 2 months–6 years). Domestication is approached holistically without dividing it in different processes. The BMTs that are of interest to this study are audio baby monitors, video baby monitors (with or without app), baby monitor wearables and sensor mats. All 15 families use a baby monitor, which they considered a "basic" to have. Two families (Felix and Sophie) used an audio baby monitor of whom only Sophie's family did not use additional sensor technology. Thirteen families used a video baby monitor, either with a stand-alone screen, an app or both. Six of those families used the app

that allows them to watch their child while away from home. Three families used a sensor mat, and two used a wearable baby monitor. Table 8 provides an overview of the families.

Table 1. Description of families

Parents	Children	BMTs
Beatrice (33 y/o) works as an assistant notary. Married to Rob.	Ella (6 y/o), Arnaud (4 y/o), Polly (1 y/o)	For Polly: video BM with app and sensor mat
Amanda (28 y/o) works in consultancy as media and communications officer. Married to Phinneas.	Lucas (7 m/o)	Video BM with stand-alone screen
Alice (30 y/o) works as a speech therapist and university teaching assistant. Lives with partner Greg.	Lucky (7 m/o)	Video BM with app
Leah (25 y/o) on maternity leave, currently looking for a job. Background in orthopedagogy. Lives together with partner Gabriel.	Levi (3 m/o)	Video BM with stand-alone screen
Felix (32 y/o) works as a professor and researcher in Communication Sciences. Lives together with partner Lana.	Alec (2 y/o)	Audio BM and sensor mat (focus on breathing). *Snuza* (wearable to monitor breathing) in daycare
Kate (27 y/o) works as a nurse in geriatric psychiatry. Married to **Walter** (29 y/o) works in finance and gives financial education in secondary schools.	Max (16 m/o)	Video BM with app
Luna (28 y/o) is on maternity leave before giving birth to her second child. Luna works as a doctor (in her fourth-fifth year of pediatric training). Married to Ben.	Owen (2 y/o)	Video BM with stand-alone screen. Used professional fetal doppler during pregnancy. Used *Oyo baby monitor* (wearable; focus on temperature, breathing, position) + its camera and app until the wearable did not fit Owen's waist anymore.
Liana (34 y/o) works for an agency. Lives together with partner Nick.	Bonnie (4 y/o), Lisa (2 y/o)	Video BM with stand-alone screen. Liana uses her own "invention" when Lisa is asleep in the car. Liana attaches her work phone to the car, directed at Lisa and video calls her work phone from her personal phone to keep an eye on Lisa.
Monica (26 y/o) works as a fraud and cybersecurity analyst at a bank. Married to Peter.	Julia (2 y/o), Lucia (8 m/o)	Video BM with stand-alone screen and sensor mat
Sophie (34 y/o) is self-employed and makes podcasts. Lives together with partner Matthew.	Wes (3 y/o), Bill (2 m/o)	Audio BM
Sabrina (30 y/o) works as a speech therapist and university teaching assistant. Married to Robert.	Eli (2 y/o)	Video BM with stand-alone screen
Chloe (28 y/o) is self-employed and works as a dog groomer. Lives together with partner Jean.	Ava-Jane (9 m/o)	Video BM with stand-alone screen

Alessia (34 y/o) works as an administrative assistant at a public agency for employment and vocational training. Married to **Kevin** (35 y/o) works as an employee at the federal government.	Emma (6 y/o), Orora (2 y/o)	Video BM with app
Claire (28 y/o) works as an administrative assistant at an insurance company. Married to Natan.	Lee (4 y/o), Xandra (1 y/o)	Video BM with app
Stella (33 y/o) works in adult basic education. Lives together with partner Elliot.	Jane (4 y/o)	Video BM with app

Note. Parents who participated in in-depth interviews are marked in bold. All names are pseudonyms.

3.2. Data collection

Interviews were conducted between January and October 2024. Some participants (Alessia, Kevin, Felix) were already involved in the broader ethnography, while others were recruited via a flyer shared on Facebook. The flyer listed examples such as the Owlet, video monitor, respiration monitor, bedroom camera, pregnancy apps and child monitoring apps. No specific technology was required, only that participants currently used BMTs. Interviews lasted 48–91 minutes (M = 60). Interviews were conducted in Dutch and illustrative quotes were later translated to English. Participants received a small financial compensation. Six participants participated in person and 11 online, following participants' preferences. Kate and Walter asked to take the interview together. Notably, only mothers registered through the flyer. After each interview, I asked whether their partner would be open to participating. All mothers were hesitant, indicating that their partner would feel uncomfortable and would not add new insights. Although I subsequently recruited more men for the ethnography, this did not lead to additional interviews on BMTs.

3.3. Interviews and analysis

Interviews were semi-structured and explored early parenthood. First, we discussed the period of pregnancy, and BMT adoption and use during pregnancy and after birth. I encouraged participants to demonstrate how they used discussed apps and devices, based on the walkthrough method (Light et al., 2018), which offers insight into users' negotiated, situated app use. We further discussed participants' transition to parenthood and worries, parenting expectations, the relationship with their partner and how they run a household together, their support system, BMT downsides and anticipated future BMT use.

The analysis is based on constructivist grounded theory, which emphasises an interpretivist approach to theory building (Charmaz, 2014). Constructivist grounded theory

views data as co-constructed and theories as situated interpretations. As such, knowledge is socially constructed and reflexivity is essential. Grounded theory methods construct theories from the data themselves by separating, sorting and synthesising data through qualitative coding. Rather than being imposed by pre-existing frameworks, the analysis builds levels of abstraction directly from the data and refines the emerging analytic categories with additional data (Charmaz, 2014). Interviews were recorded with a voice recorder, transcribed in Word and analysed in NVivo. The analysis proceeded through three stages of coding. First, during open coding, I assigned codes to (parts of) participants' sentences that remained close to participants' words. For instance, "I suddenly got so scared that we might miss it, that I was just staring at that little screen, like: Is he still breathing?" was coded as *fear to miss signs of distress* and *intensive video monitoring for breathing*. Second, in focused coding, I investigated the most meaningful initial codes to develop conceptual categories. For example, codes such as *fear of SIDS* and *sensor mat improves parents' sleep* were clustered under *reassurance*. Finally, theoretical coding investigated the relationships between categories. This revealed domestication as a balancing act and highlighted moral responsibilisation as a key interpretation of parents' sense of responsibility for their child's safety and well-being.

3.4. Ethical considerations

Participants were informed about the study's objective, their rights and data storage procedures. All signed informed consent forms. Ethical approval was obtained from the Political and Social Sciences Ethics Committee at Ghent University. Pseudonyms were used, and data were stored securely with restricted access.

4. Results

4.1. Domestication as a balancing process

The results show that parents' domestication of BMTs can be seen as a deeply personal and agentic negotiation process where parents look for a balance between technology that feels "right" and "excessive" to them. The analysis reveals that elements of *reassurance* and *autonomy* influence what feels "right", while *rationality, peace of mind, cost considerations* and *the ideal of letting go* influence what feels "excessive".

4.1.1. The benefactor: reassurance and autonomy

Overall, parents opted for a baby monitor because they believed it would reassure them, particularly during the initial months of parenthood when the main priority was to "keep their

baby alive". This period was characterised by safety fears and even imagined horror scenarios. Liana, for example, recounted, "in the beginning, I saw all these scenarios in my head with death as the outcome". Similarly, Alice felt "so afraid that we would miss something" that she recalled "looking at the little screen, wondering if he was still breathing". In these instances, "seeing your child" via a video baby monitor provided reassurance. Some parents sought reassurance through additional technologies, like sensor mats. Beatrice, for instance, found the sensor mat supplemented her video baby monitor well.

> Beatrice: The nurse said: "We don't recommend this [sensor mat] because it generates a false sense of security (. . .). You just need to follow the guidelines of placing her on her back and that's enough". But I said: "Yes we're following those guidelines anyway, but this is just an extra. A reassurance". And even if it is a false alarm. . . I'd still prefer a false alarm over no alarm. That's my reasoning. I didn't see anything wrong with that. If it gives extra reassurance.

Luna also sought extra reassurance due to a profound fear of SIDS, linked to her fear of losing loved ones and her personal experience of being orphaned young. This made her opt for a wearable around her baby's waist.

> Luna: I have a lot of fear for SIDS. We do everything to prevent it (. . .). I still wanted something extra. . . again coming from that fear. I mean, I lost my own parents, I am an orphan for a very long time already, I have lost many people (. . .) for many people, this is unnecessary. I have friends who say that they don't want it, but for me it is a fear. (. . .) When Owen went to his own room, I thought it was a great reassurance.

While audio baby monitors were considered a normalcy to many parents and understood as "a basic", video baby monitors were explicitly referred to as "handy". This "handiness" encompasses both reassurance and autonomy. Many parents appreciated not having to physically check on their baby with every noise. The video function aided parents' own reassurance. During sleep training, for example, parents let the child cry for a prolonged period without chiming in. The video function reduced guilt and offered reassurance as parents could check whether the child wasn't crying due to trouble. This also fostered the child's autonomy, as not every sound would lead to a physical check-up. Moreover, reducing physical check-ups, which could interrupt the child's sleep, helped the child sleep more independently.

> Claire: To monitor her a bit. We also let her cry in a controlled way, to help her get used to her own room. And then we could see from downstairs what she was doing, to make sure she wasn't hurting herself, because she could cry quite intensely.

Video baby monitors also enhanced parents' autonomy by allowing them to move freely around the house, checking their child from any room. This enabled small moments of personal time, like getting ready in the morning. Leah noted that the feeling of getting ready

helped her feel like a "better mom" as she then felt better and was more likely to take Levi outside. Similarly, Monica found her sensor mat brought peace of mind, improving her sleep and prevented her and Peter from "run[ning] around like headless chickens", which also benefitted their children. A striking example of intertwined reassurance and autonomy is Liana's improvised solution. She attached her work phone to the car seat, pointing it at her sleeping daughter Lisa, and called it from her personal phone. This "invention" afforded autonomy as it allows Liana to step away and run errands, and Lisa to sleep undisturbed. It also offered reassurance. Liana would keep the call open and speak to Lisa immediately upon waking to comfort her.

4.1.2. The counterbalance to excessiveness

Parents characterised "this first period" when the child is just "really a baby", as a time that essentially revolved around keeping the child alive. To many parents in the sample, this necessitated constant, unquestioned monitoring. As discussed above, many parents worried for SIDS and the mere "fear to lose your child" justified any type of monitoring. However, in their domestication of BMTs, parents counterbalanced *reassurance* and *autonomy* with elements of *rationality, peace of mind, cost considerations* and *the ideal of letting go*.

Many parents interrogated the rationality of their fears. Leah, for instance, considered it "a risk assessment, I guess. You have fears in mind. But the chance of that happening . . . you try to put it in perspective, I think, right? Like, it will be okay". Stella, whose baby Jane was born prematurely, initially considered a sensor mat due to intensive hospital monitoring but ultimately opted only for the video baby monitor after the hospital discouraged additional monitoring once Jane was home. Parents often acknowledged that others might choose additional monitoring technology if SIDS had affected their environment or if their child was more prone to it.

While peace of mind factored in parents' domestication of BMT as it provided reassurance, it also factored in their reasoning not to adopt or use certain technologies as it would "send them into overdrive". For example, video baby monitors with app allowed parents to watch their child's crib remotely. Walter, for example, recalled that on the Saturdays that his mother in law watched Max while he was at work, he would sometimes watch the app to check whether Max was already asleep. Walter mentioned how this could distract him from work, and how it could quickly become "too controlling".

> Walter: Sometimes it becomes too controlling. (. . .) You can constantly and anywhere. Even when I was at work, I could check the baby monitor like, "Oh, how is everything

> going?" In the beginning, especially when the baby was just born, you tend to want to do that too much. I think it can be distracting sometimes.

Consequently, Walter tried to limit this practice. Some parents consciously chose not to adopt video baby monitors with apps, fearing they would intervene other activities and lead to excessive checking.

> Chloe: No, we can't view it on our phone. I did that on purpose. Because otherwise, I would be more focused on whether everything is okay. Now, it's just in the kitchen while we're sitting on the couch, and I'm not looking at that little screen 24/7. If I had it on my phone, I would do that.

Relatedly, many parents noted that sensors could generate false alarms, causing undue stress and panic. Parents also recognised their own propensity to check the technology more often than desired and expected to struggle dismissing false alarms. Thus, for their own peace of mind, they sometimes decided to forgo sensors. Interestingly, parents often attributed this negative impact on peace of mind to their own "worried" character, which they seemed to know very well. Amanda, for example, identified as a hypochondriac and sought to protect herself from notifications that might trigger medical worries about her child. Sophie did not adopt an Owlet, stating her sensitivity to such monitoring technology. Sophie mentioned she would assume the worst if the technology would indicate deviating oxygen levels. Chloe, who struggled with letting go and feared losing loved ones, recalled her partner discouraging her to buy a saturation device, knowing it would be detrimental to her peace of mind. This link between personality and peace of mind also extended to parents who need the technology for their peace of mind. Alessia called herself a "helicopter mom" and used the video baby monitor for her own peace of mind. Likewise, Luna's profound fear of losing loved ones prompted her to use both a professional foetal Doppler and a sensor wearable for her baby. Last, Beatrice found that the overall peace of mind that her sensor mat provided outweighed occasional false alarms. As such, these choices are personal and influenced by parents' own character and experiences.

Cost consideration was often a secondary rather than primary reason for not adopting a certain technology. However, it is notable that even after profoundly explaining why a technology might be detrimental to their peace of mind, some parents would consider adoption if the price were lower. Leah mentioned "I think, if it only cost fifty or a hundred euros, we might actually buy it". Thus, price seemed to factor into their rational risk-assessment of what technologies (not) to acquire.

Finally, an ideal of "letting go" and a belief that "everything will go well" resonated among parents. The child's age is a significant factor here. The need for technology decreased as the child grew past the critical SIDS phase. Parents also gained confidence as they better understood their child's behaviour over time. In many cases, BMT use organically decreased over time. Liana described her baby monitor use as: "In the past, it gave guidance. I really needed it. If it were to suddenly disappear in some way, I would be slightly panicked. Now it"s really more of a tool'. While use generally decreased, there was a normative feeling about the continued use of BMTs. Using a video baby monitor after a certain age was often humorously labelled "spying" and seen as possibly enabling privacy intrusions. Parents found it hard to pinpoint an exact age to stop BMT use, as every child is different, making it a family decision. While some parents in the sample monitored their 4- and 6-year-olds, they acknowledged the need to stop this practice eventually. For all parents, this was tied to letting go and allowing their children to "be a child". Parents reminisced about their own childhoods without technology and monitoring, often linking it to freedom, a freedom they wanted their children to experience too.

4.2. Three pathways to moral responsibilisation

In the process of domesticating BMTs, it becomes clear that a moral responsibilisation is at play as domestication is tied to moral expectations and assessments of what constitutes "good parenting". The results show three distinct but interconnected pathways through which this responsibilisation manifests, which I term the self-guided, social and technologically imposed pathways. I distinguish these pathways on the basis of who or what shapes this responsibilisation process: parents themselves, parents' social environment and technology, respectively.

4.2.1. Self-guided pathway

The self-guided pathway emphasises that parents considered themselves the primary actor for ensuring their child's safety and well-being, which amounted to a responsibility to avoid any dramatic situation from happening to the child. This implied a certain level of vigilant monitoring and a sense of guilt if they didn't (adequately) use available tools.

> Chloe: I have it here, so you use it. I wouldn't be able to forgive myself if something happened and I didn't turn on the baby monitor or something like that.
> Interviewer: Do you feel in a way . . . responsible to do everything you can to . . .
> Chloe: Yes!

The self-guided pathway highlights a duty to monitor up to a certain extent to preempt harm. While the results show that parents' domestication of BMTs is a personal and agentic negotiation process, it is inextricably linked to their sense of acting responsibly.

> Stella: I don't know if "responsible" is really the best fit for me. Do I think someone who doesn't do it is therefore less responsible? No, I don't think so. Does it give me the feeling that I'm acting responsibly? Yes.

4.2.2. Social pathway

The social pathway highlights that remarks from friends and family shaped parents' domestication of BMTs. More specifically, their peers conveyed strong sentiments on what technologies and monitoring behaviours they considered "basic" or "excessive". While the core duty to pre-empt harm remains, the social pathway emphasises that peers shaped what extent of monitoring was considered responsible.

On the one hand, a total lack of BMTs often elicited surprised reactions. Claire, for instance, did not use a baby monitor with her firstborn Lee, considering it unnecessary in their tiny loft where Lee slept in a co-sleeper. Similarly, Felix did not think a baby monitor was needed when Alec slept upstairs during a weekend trip with friends. Both received surprised looks and comments from their friends. On the other hand, certain monitoring behaviours were deemed excessive, often presumed simply by owning specific technologies. Alice's friends and family, for example, assumed she constantly watched her video baby monitor app, despite her actual usage.

> Alice: Now I do notice that friends who don't have a video monitor think, "Wow, you must see so much, you must be watching all the time". But I think, I don't really use it that way, honestly. I mean, it's just there on the table, and when I'm not around, I use it like an audio monitor, and I check it occasionally. But it's not like I'm constantly watching my child.

Other examples of perceived excessiveness include parents' own parents commenting on their supposed dependency on BMTs, often contrasting it with their successful childcare experiences without advanced technologies.

4.2.3. Technologically imposed pathway

The technologically imposed pathway refers to a sense of duty to monitor one's child, enabled by the technology's availability, even when deemed unnecessary. For example, many parents habitually watched their video monitor app when away, typically to check if their child is asleep. While comfortable putting their phone away once the child is asleep, unsettling situations shown on the app compelled intervention. Beatrice and her husband were at a

wedding and received messages from her in-laws that Polly was struggling to drink and sleep. Watching the camera via the app intensified her worries, leading them to return home earlier.

> Beatrice: When you look at that camera, and you also have the sound from the camera, and if you hear her crying while you're away, it's not pleasant. And that really made us return home sooner. (. . .) In hindsight, I think, well, that was kind of silly. Because I think you can become anxious really quickly. Whereas. . . well, she was ultimately in good hands with my in-laws.

As BMTs enabled virtual presence, parents felt a moral responsibility to monitor their child, even when the child is under the care of a trusted caregiver. This duty often conflicted with practical and social limitations. Kate and Walter, for example, recalled the feeling of overstepping boundaries by watching the app when their son Max was under the care of his grandparents. When they didn't receive the usual "Max is awake and fine" message, they started worrying and decided to open the app. They were shocked to see Max with his head between the crib pillars and a blanket covering his face. Panicked, they debated contacting the grandparents but then watched them enter the room and wake Max. This incident made them feel they had overstepped, leading to more reluctant app use when Max stays with his grandparents.

Furthermore, the technologically imposed pathway highlights that the mere availability of monitoring technologies could compel parents to monitor more closely than they necessarily wanted. Parents illustrated this when they expressed worries that cameras in daycares and schools might become a "new normal", a trend they would not support or feel comfortable with. However, parents warned against their own expected urge to "just have a look". Alice, for example, felt grateful that Lucky's daycare didn't use cameras, as it spared her the personal decision not to watch. She acknowledged that if cameras were present and something went wrong, she would feel guilty or responsible for choosing not to watch.

> Alice: When I hear that there are daycares with cameras, man, I'm just glad the decision was made for us not to have that. Because I find that really difficult. I wouldn't want to watch someone through a camera. I think that's really wrong. Sorry, but I really do. That's my personal opinion. I find it super strange that it's seen as normal, but anyway. I'm glad that decision was made for me, because if it were in place, I've thought about it, I'd be the mother who consciously chooses not to watch, out of principle. Like, I'd think, "Then you"re the mother who doesn't watch'. And you've made that choice again. Then you're basically the mother who doesn't keep an eye on her child. You get what I mean?

5. Discussion

This study offers a nuanced understanding of parents' domestication of BMTs, revealing it as an agentic negotiation process, balancing what feels "right" and "excessive". This research identifies different elements shaping this balancing process: reassurance, autonomy, rationality, peace of mind, cost considerations and the ideal of letting go. The findings align with the tension discussed in the literature that BMTs can provide reassurance and paradoxically intensify anxieties (Nelson, 2008; Wang et al., 2017). While prior research often emphasises BMTs' role in reinforcing parental anxieties and vigilant parenting (e.g. Lupton and Williamson, 2017; Nelson, 2008), this study highlights that parents demonstrate self-awareness and actively limit or avoid BMTs or features perceived as detrimental to their peace of mind. This finding underscores the agentic, processual nature of domestication and hints towards instances of re-domestication. Furthermore, the findings confirm that BMTs bring autonomy to parents (Nelson, 2008) and connect this to reassurance. The findings also show that BMTs can increase autonomy for the child by reducing physical checks and waking, refining the tensions in intimate surveillance literature between "care" and "control", generally describing reassurance as a driver for surveillance, while often viewing a child's autonomy as being at stake. This study, however, aligns with emerging research showing surveillance technology can also facilitate autonomy (e.g. De Wolf et al., 2025). Last, parents' negotiation remains dynamic, influenced by changing needs, as evidenced by BMTs' role shifting from essential infant monitoring to "spying" on older children (e.g. see Widmer and Albrechtslund, 2021).

This negotiation between "right" and "excessive" takes place upon the normalisation of surveillance as an integral aspect of contemporary parenting. While sometimes questioned, there is a shared understanding that a certain extent of monitoring is expected. Liana, for example, does not use advanced BMTs, but still creates a virtual presence with her improvised phone-call invention. The focus shifts from whether to monitor to its intensity, duration, and methods. Parents' domestication of BMTs thus exemplifies how intimate surveillance is normalised as an act of care essential for "good" parenting (Dereymaeker et al., 2024; Leaver, 2017). More specifically, this study identifies a process of moral responsibilisation, through which parents are increasingly called upon, and feel responsible for specific outcomes, carrying a moral dimension.

The findings reveal that moral responsibilisation manifests through three pathways: the self-guided, social and technologically imposed pathways. Crucially, these three pathways

exist in a dynamic interplay. The self-guided pathway refers to parents' sense of duty to pre-empt harm. For many, fear of SIDS motivates monitoring. The norms for fulfilling this duty are shaped by the social pathway, where peers influence the boundaries of "basic" versus "excessive" monitoring. When peers express surprise that BMTs aren't used, it reinforces parents' feeling that they should be monitoring. Conversely, when peers label a technology "excessive", it gives social permission to limit use without feeling like a "bad" parent. The technologically imposed pathway underscores how technology itself shapes responsibilisation. While existing studies show how technologies' functionalities shape parenting (e.g. Wang et al., 2017), this study underscores that the mere availability of BMTs that enable parents' virtual presence extends the time and place within which parents are bound to this duty. This extension becomes particularly acute in societal debates about expanding surveillance technologies into institutional settings like daycares and schools. This is illustrated by Andelsman Alvarez and Meleshko's (2024) study on the Danish parent-daycare app Aula, showing how its use intensifies parental responsibility and changes caregiving. The potential presence of cameras in these environments threatens to shift the foundation of institutional care from delegated responsibility to parental virtual oversight, a dilemma clearly articulated by participants like Alice. This pathway exemplifies what Lim (2018) terms transcendent parenting, the practice of using mobile technology to extend caregiving across the traditional boundaries of time and place. It is this technologically enabled transcendence of physical presence that makes parents feel unable to escape their moral responsibility. These dynamics demonstrate the influence of platform logics on parents' negotiated use of BMTs. Consequently, this study endorses the extended-domestication theory proposed by Mannell et al. (2025) as a framework to adequately analyse how platforms exert power within and through family negotiations. Ultimately, these pathways combine to create the conditions and the frame in which parents' negotiation with BMTs takes place.

5.1. Limitations and recommendations

The study's findings should be considered in light of its sample, which consists of a homogeneous group of 17 white, middle-class parents (14 mothers and 3 fathers) in long-term heterosexual relationships. This research remained on the level of parents' domestication of BMTs and did not explore intersections of gender, class and race, despite their importance. As argued in the literature, responsibilisation is gendered as it is influenced by ideals on motherhood such as intensive mothering, which are also racialised and classed (Solinger, 2005; Song et al., 2012). These ideals assume resources and support, primarily accessible to middle-

and upper-class women and have been historically shaped by race and class, where white affluent women are more likely to be viewed as "ideal" caregivers. I invite future research to investigate these intersections within responsibilisation and include the lived experiences of parents who fall outside these dominant demographics. Furthermore, building on the normative stance towards discontinued BMT use, I recommend exploring parents' and children's lived experiences with surveillance technologies among older children. I particularly encourage child-centric research as a focus on children's perspectives and agency with regard to intimate surveillance remains limited (Cino et al., 2020; De Wolf et al., 2025).

5.2. Implications

This article demonstrates that parents' domestication of BMTs is an agentic negotiation process, where they strike a personal balance between what feels "right" and "excessive". However, this article further shows that this agentic negotiation is situated within the context of the normalisation of intimate surveillance and a process of moral responsibilisation tied to parents' domestication of BMTs. This moral responsibilisation has important implications. It questions whether caregiving can be truly outsourced, thereby highlighting an individualisation of caregiving. The possibility of maintaining a virtual presence creates a moral pressure on parents to always be there, undermining their ability to fully entrust their child to trusted caregivers. As a result, parents may feel compelled to keep monitoring, meaning care is never truly delegated. This has consequences for how we view parental choice. With the penetration of monitoring technologies that enable parents' virtual presence, the choice not to monitor one's child might become a political act rather than a personal decision. Therefore, I encourage to refrain from normative evaluations of parents' choices and focus on a critical assessment of the expansion of monitoring technologies themselves, particularly into institutional settings like daycares and schools. This ultimately calls for a broader debate about the kind of care and trust we wish to foster in an age of ubiquitous technology.

Declaration of conflicting interests

The author declared no potential conflicts of interest with respect to the research, authorship and/ or publication of this article.

Funding

The author disclosed receipt of the following financial support for the research, authorship and/or publication of this article: This work was supported by the Research Fund of Ghent University (grant number BOF.STG.2022.0010.01).

Ethical approval and informed consent statements

This study was ethically approved by the Political and Social Sciences Ethics Committee at Ghent University. Informed consent for publication was provided by the participants in this study.

Data availability statement

The datasets generated during this study are not publicly available due to personal and sensitive information, shared with the researcher in confidence for the purpose of this study. Further, informed consents and approval from the Ethics Committee are obtained on the condition of complete anonymisation, which is not possible for these datasets given the risk of re-identification.

Submission statement

The article is not being considered for publication by any other journal.

ORCID iD

Julie Dereymaeker https://orcid.org/0000-0003-1664-1067

References

Andelsman Alvarez, V., & Meleschko, S. K. (2024). Going above and beyond? How parent–daycare mobile communication reconfigures the time and space dimensions of parenting. *Mobile Media & Communication*, *12*(1), 112–130. https://doi.org/10.1177/20501579231203533

Barassi, V. (2017). BabyVeillance? Expecting Parents, Online Surveillance and the Cultural Specificity of Pregnancy Apps. *Social Media + Society*, *3*(2), 2056305117707188. https://doi.org/10.1177/2056305117707188

Beck, U., & Beck-Gernsheim, E. (1995). *The Normal Chaos of Love*. John Wiley & Sons.

Brown, R. C. H., Maslen, H., & Savulescu, J. (2019). Against Moral Responsibilisation of Health: Prudential Responsibility and Health Promotion. *Public Health Ethics*, *12*(2), 114–129. https://doi.org/10.1093/phe/phz006

Cappella. (2023). The future of baby monitors: how Cappella's innovative solution transcends traditional baby monitors. Previously available at: http://www.cappella.io/the-future-of-baby-monitors (Archived at: https://web.archive.org/web/20240213102739/https://www.cappella.io/the-future-of-baby-monitors/) (accessed 1 November 2024).

Charmaz, K. (2014). *Constructing grounded theory* (2. ed). SAGE.

Cino, D., Mascheroni, G., & Wartella, E. (2020). "The Kids Hate It, but We Love It!": Parents' Reviews of Circle. *Media and Communication*, *8*(4), 208–217. https://doi.org/10.17645/mac.v8i4.3247

Cradock, G. (2004). Risk, Morality, and Child Protection: Risk Calculation as Guides to Practice. *Science, Technology, & Human Values*, *29*(3), 314–331. https://doi.org/10.1177/0162243904264484

Dangerfield, M. I., Ward, K., Davidson, L., & Adamian, M. (2017). Initial Experience and Usage Patterns With the Owlet Smart Sock Monitor in 47,495 Newborns. *Global Pediatric Health*, *4*, 2333794X17742751. https://doi.org/10.1177/2333794X17742751

De Wolf, R., Dereymaeker, J., Mazzocchi, G., & De Leyn, T. (2026). Exploring children's perspectives on parental surveillance in Belgium. *Journal of Children and Media*, *20*(1), 92–110. https://doi.org/10.1080/17482798.2025.2511712

Dereymaeker, J., Schokkenbroek, J. M., Martens, M., & De Wolf, R. (2024). Smarter homes, smarter surveillance? Exploring intimate surveillance practices in modern day households. *New Media & Society*, *27*(11), 6119–6138. https://doi.org/10.1177/14614448241263757

Ennis, L. R. (2014). *Intensive Mothering: The Cultural Contradictions of Modern Motherhood*. Demeter Press.

Haddon, L. (2007). Roger Silverstone's legacies: Domestication. *New Media & Society*, *9*(1), 25–32. https://doi.org/10.1177/1461444807075201

Hammersley, M. (2018). What is ethnography? Can it survive? Should it? *Ethnography and Education*, *13*(1), 1–17. https://doi.org/10.1080/17457823.2017.1298458

Hasan, M. N.-U., & Negulescu, I. I. (2020). Wearable technology for baby monitoring: A review. *Journal of Textile Engineering & Fashion Technology*, *6*(4). https://doi.org/10.15406/jteft.2020.06.00239

Hasan, M. N.-U., & Stannard, C. R. (2022). Exploring online consumer reviews of wearable technology: The Owlet Smart Sock. *Research Journal of Textile and Apparel*, *27*(2), 157–173. https://doi.org/10.1108/RJTA-08-2021-0103

Hays, S. (1996). *The cultural contradictions of motherhood*. Yale University Press.

Herzfeld, M. (2014). Serendipitous Sculpture: Ethnography Does as Ethnography Goes. *Anthropology and Humanism*, *39*(1), 3–9. https://doi.org/10.1111/anhu.12031

Holloway, D., Mascheroni, G., & Inglis, S. (2020). The Quantified Baby: Discourses of Consumption. In L. Tsaliki & D. Chronaki (Eds), *Discourses of Anxiety over Childhood and Youth across Cultures* (pp. 99–118). Springer International Publishing. https://doi.org/10.1007/978-3-030-46436-3_5

Johnson, S. A. (2014). "Maternal Devices", Social Media and the Self-Management of Pregnancy, Mothering and Child Health. *Societies*, *4*(2), 330–350. https://doi.org/10.3390/soc4020330

Kinney, H. C., & Thach, B. T. (2009). The Sudden Infant Death Syndrome. *New England Journal of Medicine*, *361*(8), 795–805. https://doi.org/10.1056/NEJMra0803836

Leaver, T. (2015). Born Digital? Presence, Privacy, and Intimate Surveillance. In J. Hartley, & W. Qu (Eds.), *Re-Orientation: Translingual Transcultural Transmedia. Studies in narrative, language, identity, and knowledge* (pp. 149–160). Shanghai: Fudan University Press.

Leaver, T. (2017). Intimate Surveillance: Normalizing Parental Monitoring and Mediation of Infants Online. *Social Media + Society*, *3*(2), 2056305117707192. https://doi.org/10.1177/2056305117707192

Light, B., Burgess, J., & Duguay, S. (2018). The walkthrough method: An approach to the study of apps. *New Media & Society*, *20*(3), 881–900. https://doi.org/10.1177/1461444816675438

Lim, S. S. (2018). *Transcendent parenting in digitally connected families: When the technological meets the social* (pp. 31–39). Nordicom, University of Gothenburg. https://urn.kb.se/resolve?urn=urn:nbn:se:norden:org:diva-12016

Lupton, D. (2013). Infant embodiment and interembodiment: A review of sociocultural perspectives. *Childhood*, *20*(1), 37–50. https://doi.org/10.1177/0907568212447244

Lupton, D. (2020). Caring Dataveillance: Women's Use of Apps to Monitor Pregnancy and Children. In *The Routledge Companion to Digital Media and Children*. Routledge.

Lupton, D., & Thomas, G. M. (2015). Playing Pregnancy: The Ludification and Gamification of Expectant Motherhood in Smartphone Apps. *M/C Journal*, *18*(5). https://doi.org/10.5204/mcj.1012

Lupton, D., & Williamson, B. (2017). The datafied child: The dataveillance of children and implications for their rights. *New Media & Society*, *19*(5), 780–794. https://doi.org/10.1177/1461444816686328

Mannell, K., Sefton-Green, J., & Erstad, O. (2025). Conclusion: Towards Further Research into the Platformization of the Family. In J. Sefton-Green, K. Mannell, & O. Erstad (Eds), *The Platformization of the Family: Towards a Research Agenda* (pp. 93–109). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-74881-3_6

Nelson, M. K. (2008). Watching Children: Describing the Use of Baby Monitors on Epinions.com. *Journal of Family Issues*, *29*(4), 516–538. https://doi.org/10.1177/0192513X07310319

Pangrazio, L., Langton, K., & Siibak, A. (2025). How the Family Makes Itself: The Platformization of Parenting in Early Childhood. In J. Sefton-Green, K. Mannell, & O. Erstad (Eds), *The Platformization of the Family: Towards a Research Agenda* (pp. 47–68). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-74881-3_4

Peil, C., & Röser, J. (2023). Conceptualizing re-domestication: Theoretical reflections and empirical findings to a neglected concept. In *The Routledge Handbook of Media and Technology Domestication*. Routledge.

Silverstone, R. (2005). *Domesticating domestication: Reflections on the life of a concept* (T. Berker, M. Hartmann, Y. Punie, & K. J. Ward, Eds; pp. 229–248). Open University. http://mcgraw-hill.co.uk/openup

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. 115–131). Routledge. https://doi.org/10.4324/9780203401491

Solinger, R. (2005). *Pregnancy and Power: A Short History of Reproductive Politics in America*. NYU Press.

Song, F. W., West, J. E., Lundy, L., & Smith Dahmen, N. (2012). Women, Pregnancy, and Health Information Online: The Making of Informed Patients and Ideal Mothers. *Gender & Society*, *26*(5), 773–798. https://doi.org/10.1177/0891243212446336

Wakefield, A., & Fleming, J. (2009). *The SAGE Dictionary of Policing*. SAGE Publications Ltd. https://doi.org/10.4135/9781446269053

Wang, J., O'Kane, A. A., Newhouse, N., Sethu-Jones, G. R., & de Barbaro, K. (2017). Quantified Baby: Parenting and the Use of a Baby Wearable in the Wild. *Proceedings of the ACM on Human-Computer Interaction*, *1*(CSCW), 108:1-108:19. https://doi.org/10.1145/3134743

Widmer, S., & Albrechtslund, A. (2021). The ambiguities of surveillance as care and control: Struggles in the domestication of location-tracking applications by Danish parents. *Nordicom Review*, *42*(s4), 79–93. https://doi.org/10.2478/nor-2021-0042

Williams, B. (1981). *Moral Luck: Philosophical Papers 1973–1980*. Cambridge University Press. https://doi.org/10.1017/CBO9781139165860