



# Parental surveillance and parenting styles: Toward a model of familial surveillance climates

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## Abstract

This study examines parental surveillance of preadolescents based on location-tracking applications installed on their smartphones. Applying reflexive thematic analysis to 24 semi-structured, in-depth interviews with mothers of middle-school children, the study asks how mothers with different parenting styles describe their surveillance ideologies and practices, and what are the sociocultural imageries that motivate their use of location-tracking applications. The findings offer six criteria for evaluating different familial surveillance climates, organizing them in a three-tier model that demonstrates the multidimensionality of digital parental surveillance. Consequently, the study challenges the presumed link between parental surveillance and strict parenting styles (e.g., authoritarian, helicopter). Acknowledging the increasing normalization of digital parental surveillance, the study advances a balanced and pragmatic view of this trend while illuminating participatory methods of implementing what is often considered a suppressive practice.

## Keywords

parental surveillance, parenting styles, location-tracking, GPS, thematic analysis, Diana Baumrind

## Introduction

Over the past four decades, surveillance has emerged as a dominant organizing practice of late modernity, performed by individuals, corporations, organizations, and nation states (Lyon et al., 2012). Surveillance scholarship has thus developed into an established

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field that commonly addresses public, sociopolitical contexts of surveillance, ranging from law enforcement and security (Marciano, 2019) to corporate surveillance (Turow, 2006). During the past 20 years, however, surveillance studies have increasingly addressed personal relationships as a new surveillance context. One prominent manifestation thereof is digital parental surveillance, which is becoming a norm in Western societies (Barron, 2014).

Research on parental surveillance is conducted across disciplines, including education (Rooney, 2010), communication (Chung & Grimes, 2006), anthropology (Barron, 2014), geography (Jones et al., 2003), law (Simpson, 2014), and management (Bettany & Kerrane, 2016). Many of these studies focus on children, aiming to understand how they experience parental surveillance and its possible effects on their long-term social skills (Barron, 2014; Ghosh et al., 2018; Jones et al., 2003). While a growing number of studies emphasize parents' perspectives and experiences (Ervasti et al., 2016; Ferron et al., 2019; Vasalou et al., 2012), the interplay between parental location tracking and parenting styles has received little scholarly attention so far (notable exceptions are Bettany & Kerrane, 2016; Nakayama, 2011).

Studying this interplay is important for problematizing the simplistic reduction of parental surveillance to controlling parenting (see Bettany & Kerrane, 2016), thereby illuminating the complexity of parental surveillance. Such examination also addresses the growing normalization of parental surveillance from a different angle (Barron, 2014; Simpson, 2014), pointing out the need to educate parents about more respectful and participatory ways to engage in child surveillance.

The present study focuses on the interplay between parental surveillance and parenting styles. Through 24 semi-structured, in-depth interviews with mothers of middle-school children, it asks how participants with different parenting styles describe their surveillance ideologies and practices, inquiring as to the nature of the sociocultural imageries motivating their use of location-tracking applications. The study challenges the presumed link between parental surveillance and strict parenting styles, as discussed in the following section. By focusing on mothers who monitor their preadolescents rather than on the differences between those who monitor and those who do not, the study offers six criteria for defining and characterizing different familial surveillance climates, organizing them in a three-tier model that demonstrates the multidimensionality of parental surveillance.

## **Theoretical framework**

### *Parenting styles*

Parenting styles refer to the ways in which parents think, feel, and act toward their children. Current research on parenting styles is dominated by Diana Baumrind's well-known typology, which consists of four styles: Permissive, authoritative, authoritarian (Baumrind, 1966, 1967), and rejecting-neglecting (Baumrind, 1971, 1991b). These styles result from the intersection of two dimensions: Demandingness and responsiveness (Baumrind, 1991a; see also Maccoby & Martin, 1983). Demandingness is the extent to which parents set limits and maturity demands, supervise their children's behavior,

and enact other disciplinary efforts to integrate their children into society. Responsiveness is the extent to which parents are sensitive to their children's needs, accept and support their position and behavior, and express affective warmth to foster their individuality and autonomy (Baumrind, 1991b; Maccoby & Martin, 1983).

*Permissive* parents score low on demandingness and high on responsiveness. They are warm and accepting but indulgent and passive. They adopt a child-centered attitude and express their love by giving in to their children's wishes to avoid confrontation. They are lax regarding maturity demands and consequently tend to tolerate misbehavior. *Authoritarian* parents score high on demandingness and low on responsiveness. They are strict, highly controlling, and show little warmth. Authoritarian parents provide an orderly environment, set high maturity demands through rules and regulations, and expect obedience without explanation, as opposed to open communication and negotiation. They value a restrictive and punitive style, and monitor their children's activities carefully. *Authoritative* parents are both demanding and responsive. They are warm and affectionate, but at the same time set limits and maturity demands through reciprocal communication. They are assertive but not restrictive in the sense that they support their children's independent quests, listen to them, consider their viewpoints, and explain their parental considerations and decisions. *Rejecting-Neglecting* or disengaged parents are neither demanding nor responsive. They are insensitive, even indifferent to their children's needs and experiences. They do not support or supervise their children, and in some cases might actively reject or neglect their parental responsibilities (Baumrind, 1971, 1991b).

Studies suggest that parental styles significantly impact the physical, cognitive, and social development of children and preadolescents, from welfare and well-being to school achievements and social skills (Aunola et al., 2000). Developmental psychologists generally agree that the authoritative style is ideal, whereas the rejecting-neglecting style is the most detrimental in terms of dis/encouraging social competence, responsibility, independence, and autonomy (Baumrind, 1991b; Steinberg, 2001).

Baumrind's parenting styles provide useful tools for understanding and discussing parental ideologies and practices, along with newer conceptualizations that reflect socio-cultural developments in contemporary Western societies. Among these developments are the changing role of fear and risk and its impact on contemporary parenting and childhood.

### *Childhood and parenting in the age of fear and risk*

The increasing "culture of fear" (Furedi, 2006) appears particularly apposite for contextualizing parental surveillance through technology, because it changed the ways parents perceive and address risk, consequently altering experiences of childhood (Stephenson, 2003).

Malone (2007) uses the metaphor of the child as a growing plant to illuminate this shift, comparing parents to gardeners who nurture and protect their child to ensure healthy development and eliminate any dangers that may damage the fragile organism. To that end, parents exert mighty efforts to control and manage the world "beyond the fence," resulting in a growing phenomenon of "bubble-wrapping" the children.

This ideology of protection, invoked by various (perceived) threats, from increasing traffic to stranger danger (Barker, 2003), has led to a “crisis in the spatialities of childhood” (Jones et al., 2003, p. 167), reflecting a gradual transition of children from natural wild spaces to urban environments, from outdoors to indoors, and from fields and streets to walled playgrounds (see Barron, 2014; Malone, 2007). However, the shift to “protected spaces” has not nullified parents’ fear, as many of them still view playgrounds as restrictive spaces where their children’s safety should be managed and their freedom controlled (Valentine, 2004).

The “confinement and control of childhood spatialities” (Jones et al., 2003, p. 168) are closely related to the increasing tendency to pack children’s schedules tightly with extracurricular activities (Grose, 2005) in an effort to supervise their private lives and eliminate potential risks. However, many parental practices aimed at neutralizing risks, such as remote surveillance, provide parents with a sense of control but in practice minimize their perception of risk rather than the risk itself (Fotel & Thomsen, 2004; Jørgensen, 2004).

Parents’ desire to create a risk-free environment for their children (Rooney, 2010) translates into new parenting tendencies, including overprotective (Ungar, 2009), helicopter (LeMoyne & Buchanan, 2011), and paranoid (Pain, 2006), among other manifestations of overparenting (Segrin et al., 2012). Overparenting refers to parents’ excessive and developmentally inappropriate involvement in their children’s lives. It is driven by parents’ “overzealous desires to ensure the success and happiness of their children [. . .] and to remove any perceived obstacles to those positive outcomes” (Segrin et al., 2012, p. 238). Over-involvement is detrimental and associated with negative outcomes (Marano, 2008). Numerous studies point to the potential impact of bubble-wrapping children (Malone, 2007; Rooney, 2010; Valentine, 1997), suggesting that risk aversion undermines childhood because it restrains children’s exploration of physical, social, and virtual worlds (Gill, 2007) and prevents them from developing important social skills (Malone, 2007).

Helicopter parenting is probably the most prominent manifestation of overparenting, referring to overly involved and protecting parents who constantly hover over their children, impeding their achievement of the levels of autonomy and independence suiting their age (Odenweller et al., 2014; Segrin et al., 2012). Excessive hovering is harmful because it takes normative parental concerns to a dysfunctional level (LeMoyne & Buchanan, 2011).

Parenting styles and practices are associated with family communication patterns, which Koerner and Fitzpatrick (2006) define as central beliefs that determine much of how families interact and communicate. They identified two basic orientations: Conversation orientation refers to the extent to which families encourage a climate of unrestrained interaction among all family members about various topics, and conformity orientation refers to the extent to which families encourage homogenous attitudes, values, and beliefs. Studies reveal that conformity orientation is associated with controlling parenting (e.g., authoritarian, helicopter) (Odenweller et al., 2014).

Overparenting, and helicopter parenting in particular, are especially apposite for addressing parental use of surveillance technologies, which allow constant hovering. Exploiting parents’ imageries of fear and risk, these technologies are promoted as

providing parents and children with a desirable combination of freedom and safety, so that children can pursue independence and autonomy, return to “wilder” spaces (e.g., streets and fields), and enjoy a busy schedule away from home and beyond the protecting fence, while their parents supervise and watch, ready to protect nonetheless (Bettany & Kerrane, 2016).

The media play a central role in creating a discourse of fear, perpetuating the message that “danger and risk are a central feature of the effective environment” (Altheide & Michalowski, 1999, p. 475). More specifically, the media construct a narrative of “childhood in crisis” (Kehily, 2010), thus legitimizing heightened parental control. Furedi (2001) argues that contemporary parenting is saturated with fear and paranoia because the media support a “child protection industry” that nurtures moral panic and encourages parents to manage, control, and monitor their children.

Numerous empirical studies have supported this claim. Kehily (2010) demonstrated the discursive construction of parental fear and anxiety by analyzing media commentary and reports; Franklin and Cromby (2009) conducted focus groups in which children and parents identified the media as responsible for perpetuating the same parental concerns; similarly, Pynn et al. (2019) showed that parents consider the media’s influence on their perceptions of risk and safety as a prominent explanation for their over-involvement in their children’s lives, including supervising and monitoring them.

While location-tracking applications are often debated critically in the media, with discussions of their potential ramifications (see Bettany & Kerrane, 2016), their marketing exploits the parental fear constructed in the media. For example, Simpson (2014) analyzed the websites of popular applications such as *Life360* and *Eyewatch* and showed that fear is constructed in two different manners: fear of external dangers and fear that nonuse will be judged as irresponsible parenting.

### *Use of child surveillance technologies: Motivations and consequences*

Over the past two decades, surveillance scholars have been shifting their focus away from traditional, top-down surveillance by states and corporations toward new forms of post-panoptic surveillance, whereby ordinary people monitor and track each other (Timan & Albrechtslund, 2018). These new forms of *participatory surveillance* (Albrechtslund, 2008) mean that surveillance practices are no longer confined to traditional contexts (e.g., law enforcement) but increasingly enter personal relationships and other private domains (Rooney, 2010). Parental use of location-tracking applications is one prominent manifestation of this trend.

Location-tracking applications rely on the Global Positioning System (GPS), which calculates the location, time, and velocity of GPS receivers. In 1995, the US government released this military system for civil-commercial use, before lifting the “selective availability” restriction to allow users the same level of accuracy as the military. This resulted in a steady increase in the adoption of GPS-based devices and specifically the proliferation of location-tracking applications (Michael et al., 2006).

These apps are used to track and ultimately restrict children’s mobility while away from parental view by providing parents with geolocations on a map and a timeline of past trips. Advanced applications such as *Life360* also offer a panic button for emergencies and allow

parents to set alarmed “digital fences” around pre-defined “safe zones.” Several other applications such as *Cerberus* also allow parents to eavesdrop on the child’s surroundings by remote activation of the microphone (Bettany & Kerrane, 2016; Simpson, 2014).

Although such surveillance technologies are increasingly associated with care, safety, and protection rather than discipline and control (Rooney, 2010), even presented as “a necessary tool of responsible and loving parenting” (Marx & Steeves, 2010, p. 193), they are thought to have detrimental consequences on children. Surveillance and technology scholars assume that children need their own free and unsupervised spaces (Steeves & Jones, 2010) that allow for heightened mobility (Fotel & Thomsen, 2004) and spontaneous interactions with others to develop independence and autonomy (Livingstone, 2002). Close monitoring, on the other hand, hinders resilience (Livingstone, 2009) and discourages pro-social behavior (Kerr et al., 1999). For example, resorting to the panic button offered by most location-tracking applications, such as *Life360*, promotes dependence rather than self-reliance, preventing children from practicing important social skills (Simpson, 2014). According to Rooney (2010), the problem with tracking applications is that they aim to replace trust-based relationships, thereby obviating the basic need to trust. Parents’ trust cultivates trustworthiness in the sense that “without a surveillance gaze, children have the opportunity to be trusted, to learn how to trust others, and perhaps to show others they can live up to this trust” (p. 354).

Against the normalization of parental surveillance (Barron, 2014; Simpson, 2014) and the potential consequences of location-tracking applications, as described above, research suggests that young people learn to negotiate their privacy and develop strategies of resistance to parental monitoring through mobile phones (Clark, 2013; Ling & Haddon, 2008). Although parents perceive and use mobile phones as a means of extending authority and control, children are not passive recipients but rather involved in active negotiation and resistance that empower them by increasing their autonomy and independent mobility (Barron, 2014; Williams & Williams, 2005).

Studies examining reception and use of location-tracking applications show that parents that oppose them tend to value trust in the family and child independence (Vasalou et al., 2012). Correspondingly, parents’ tendency to control their children was the most significant predictor of using these apps (Nakayama, 2011). Ghosh et al. (2018) discovered that children were significantly less enthusiastic about such apps than their parents, and considered them overly invasive of their privacy and harmful to their relationships with their parents. However, experimental field studies pointed out more attentive ways to use location tracking, for example, by involving children and parents as equal contributors in the co-design of tracking technologies (Ervasti et al., 2016) or by using proximity detection (between a Bluetooth device given to the child and a responsible adult’s smartphone) as a compromise between safety and trust (Ferron et al., 2019). Importantly, these studies frame location-tracking applications as promoting secure mobility rather than restricting independence.

## Method

In this study, I asked how mothers of middle-school children (aged 12–15) describe their surveillance ideologies and practices and inquired regarding the sociocultural imageries

that motivate their decisions and actions in the realm of parental surveillance. To answer these questions, I applied reflexive thematic analysis to 24 semi-structured, in-depth interviews with mothers who monitor their children through location-tracking applications installed on children's smartphones.

### *Sampling*

Study participants were recruited through messages posted on seven different Facebook neighborhood groups in Tel Aviv, Israel. These posts were approved by the groups' administrators beforehand. All respondents were mothers, and while this is a limitation (which I address later; see also Scott et al., 2012), it is supported by research according to which mothers not only exercise most parental responsibilities (Henderson et al., 2010), but are increasingly expected to watch and monitor the children (Hays, 1996). Participants confirmed this observation.

All participants live in Tel Aviv and their average age is 39. Out of 24 participants, 17 are married, five are divorced and single, and two are single and never married. Six participants have secondary education, ten hold BA degrees, six hold MA degrees and two have PhDs. Two participants have one child, 11 have two children, eight have three children, and three have four children. Nine participants have more than one child in middle school. Participants are distributed equally in terms of their children's gender.

### *Semi-structured interviews*

In-depth, semi-structured interviews are a data collection strategy aimed at providing the researcher with participants' subjective experiences and perspectives about a particular topic. They are informal and conversational in tone, and seek to establish an intimate atmosphere in which both sides feel comfortable to comment and respond about matters raised by the researcher (Longhurst, 2010). The author-interviewer is a male, and this might have influenced the gendered dynamics of the interviews.

Interviews took place at participants' homes, community centers, or cafés. Interviews began with a general warm-up request ("Tell me about yourself") and continued with several sociodemographic questions aimed at obtaining information about participants' backgrounds. The principal part of each interview included predetermined open questions that were often modified according to participants' responses. The interviews lasted between one and two hours (mean=1:31) and were recorded and transcribed verbatim.

After completing a demographic questionnaire, participants were asked about (1) general parenting and parent-child relations, including direct questions about parenting styles (e.g., "how would you describe your general approach to parenting?"; see Holt et al., 2009); (2) parental surveillance ideologies (e.g., "how would you define your surveillance regime?"); and (3) specific surveillance practices, including use of location-tracking applications (which applications are used, how often, for what purposes etc.).

It should be noted that most studies about parenting styles used quantitative scales or mixed-method approaches to measure parents' positions (see Sangawi et al., 2015), and only few relied exclusively on interviews (see Holt et al., 2009). In this study I used interviews to characterize participants' parenting styles because I was interested in how

they understand, negotiate, and display their parenting rather than in any “objective” measure of their styles.

### **Reflexive thematic analysis**

Thematic analysis is an umbrella term referring to different approaches aimed at identifying, organizing, and classifying insights into patterns (“themes”) across qualitative datasets. In this study, I applied reflexive thematic analysis, a systematic approach developed by Braun and Clarke (2006), that “emphasizes meaning as contextual or situated, reality or realities as multiple and researcher subjectivity as not just valid but a resource” (Braun et al., 2018, p. 6), rendering it particularly suitable for use with interview data (Braun et al., 2015).

Reflexive thematic analysis consists of six phases (see Braun & Clarke, 2006; Braun et al., 2018). *Familiarization* refers to initial search for intriguing features and connections that might add depth to subsequent, more systematic coding. Practically, the researcher reads and rereads the data, with attention to casual remarks that parallel research questions. *Generating codes* is a detailed engagement with the data in which the researcher labels different units systematically to identify initial meaning throughout the dataset. Codes might reflect explicit ideas expressed by participants (semantic codes) or represent a deeper, more abstract level of meaning (latent codes). I used inductive coding, a bottom-up strategy in which the analytic process originates in the data. This strategy does not deny the researcher’s existing knowledge, but rather addresses the data as the starting point for analysis. Overall, I ascribed 33 codes to different textual units (words, clauses, sentences, claims, and stories).

*Constructing themes* is a process in which related codes are merged into clusters of meaning that illuminate a particular part of the dataset. For example, the codes “pedophilia” and “child abductions” were merged into the higher construct “stranger danger,” and together with parallel constructs (e.g., horror stories, media portrayals, deliberate intimidation), the theme “moral panic” emerged. The next two phases, *reviewing* and *defining themes*, refer to the processes in which the researcher “tests” existing themes against the research questions and refines their boundaries by providing clear definitions and names. For example, the theme “moral panic” was redefined as “politics of fear and risk.” These two phases resulted in the criteria presented in the next section. The final phase, *producing the report*, is intended “to tell the complicated story of your data in a way which convinces the reader of the merit and validity of your analysis” (Braun & Clarke, 2006, p. 93).

## **Analysis and results**

The findings of this study challenge the presumed link between strict parenting styles (e.g., authoritarian, helicopter, etc.) and the existence of parental surveillance (see Bettany & Kerrane, 2016; Ur et al., 2014). The study suggests that parenting styles, among other factors, are related to familial surveillance climates, that I define here as power relations between parents and their children with regard to surveillance. In other



words, participants' experiences suggest that parenting styles determine the scope and form of intrafamilial surveillance rather than its presence or lack thereof.

Because the study focused on surveillant mothers, none of the participants used the rejecting-neglecting style, and I was expecting to encounter authoritarian, authoritative, and permissive mothers. However, as the interviews progressed, it became clear that the permissive style did not explain participants' experiences because digital surveillance of children reflected a significant degree of demandingness. I was left with surveillant mothers who were relatively easy to group into the remaining two styles (which is common in studies about governing and controlling parents, see Chan et al., 2009).

Below, I list six criteria that define familial surveillance climates, all of which may be situated on a continuum whose extremes represent authoritative and authoritarian approaches, respectively. These criteria are the broadest themes resulting from the thematic analysis.

### *Children's agency and the nature of consent*

Authoritative and authoritarian families differ in levels of agency attributed to children and consequently in the nature of their consent to parental surveillance. In families with an authoritative approach, children enjoy relatively high levels of agency, entailing what I call *negotiated consent*. Basic demandingness in these families manifests itself in the very existence of surveillance as a starting point (as opposed to permissive families, in which surveillance might be waived altogether). Responsiveness is high because parents value children's views to the extent that the scope and form of surveillance are negotiated. Demandingness and responsiveness are relatively balanced against each other because parents' right to monitor their children is endorsed, as is the children's right to participate actively in their parents' decision-making regarding their surveillance. In other words, although parents have exclusive rights over the "what" (i.e., surveillance), children negotiate over all the rest—when, where, how much, etc.

I **made it clear** that his whereabouts should be known to me and to his father, but then he told me: "You know what, let's make a **deal**. If you're gonna use **my** phone to track me, I need to know that it's only about location, and that we turn it off on specific occasions." I thought it was fair. Isn't it **convincing**? (Luda, see Appendix 1 for a detailed list of participants).

We can't imagine a situation in which she's completely on her own, but we also can't turn her into a docile pawn. [. . .] She wants and needs to have a say. I can understand that. In fact, I'm happy with that (Shula).

The first quote by Luda demonstrates the balance between basic demandingness—"I made it clear" implies that surveillance is a given—and a relatively high level of responsiveness, which is evident in negotiation between the son, who set specific terms, and his mother, who was persuaded by his explanations. Similarly, the second quote shows that while surveillance is deemed indispensable, so is the daughter's right to be heard. The following citation reflects a more authoritarian approach:

My younger son has no idea that *Life360* is installed on his device. The older one is aware of it but understands that [ . . . ] it's out of his hands. We were fair enough to explain that parents set the rules. It's for his safety, after all (Romi).

As this quote suggests, in families with an authoritarian approach, children have little agency, and the asymmetry between demandingness and responsiveness is evident either in hidden surveillance of which the children are unaware, or *enforced consent*, according to which the scope and form of surveillance (e.g., apps used) are determined solely by the parents. Children's agency and the nature of consent (negotiated vs. enforced) derive from the next criterion: Ownership of the surveillance device.

### *Ownership of the surveillance device*

Authoritative and authoritarian families also differ in the way they define ownership of the smartphone. In families with an authoritative approach, the devices belong to the children and confiscation is unlikely, although none of the children purchased their devices. Children's ownership of the device does not derive from parental laxity, as might be the case with permissive parents, but rather reflects respect for the child, reluctance to threaten him/her with confiscating material objects, and a desire to achieve mutual understanding through authentic discussion and negotiation. The first quote by Luda shows that the son is able to introduce preconditions for surveillance because his ownership of the phone is taken for granted ("If you're gonna use **my** phone [ . . . ] I need to know that it's only about location"). Children's exclusive ownership of their devices was presumed by several mothers, who claimed that they could "only hope for cooperation" (Emma) and "speak sensibly to explain the great potential of using this device" (Meirav). When I asked about confiscation, Shula replied: "I'm not a teacher. This is not how it works here, we're in it together," while Hagar responded: "It's not like she's four years old."

Families with an authoritarian approach declare and perceive smartphones to be owned by parents and lent to children. A constant threat of confiscation hints that the children's right to use the phone is contingent on acquiescence, thus encouraging enforced consent. This threat, that several parents discussed facetiously in terms of blackmail, exploits the important role that smartphones play in children's social lives. Naomi explained the tradeoff: "We don't really have to say it out loud—it's all or nothing. If you want a phone, take it with the app installed." Shosh shared: "A week after I installed the app, his location suddenly disappeared. I was very clear about it: 'The next time you get rid of the app, you'll be getting rid of your phone. It's a privilege, not a birthright.'" Both ownership of the device and the resulting agency attributed to the children determine the role of resistance.

### *The role of resistance*

Authoritative surveillance climates seem to obviate resistance. Authoritative participants believed that children who enjoy high levels of agency, negotiate with their parents, and are not subject to threats of confiscation have little to no motivation to resist. According

to the mothers' interpretations, resistance becomes irrelevant because the children get to decide about the scope and form of their own surveillance. As participants told me: "Resist what? We don't think there's a problem, and believe me, we keep our eyes open (Shula)" or: "If someone should resist, it's me. There's nothing on her phone that she doesn't like" (Na'ama).

In families with authoritarian approaches, resistance and manipulation are common and perceived as illegitimate violation of parental authority. Parents discuss children's strategies aimed at manipulating parental restrictions in terms of disobedience, thus confirming the enforced nature of their children's consent: "Oh yeah, they both tried to fool me more than once, but I assure you that they learned their lesson. Their phones are too important for them to mess with me" (Shosh); "True, she is creative and she has that friend who teaches her exactly what to do, but now we use this service that makes sure everything's working. She will probably outfox them. It's an arms race" (Michal).

### *Politics of fear and risk*

Authoritative parents appear to be critical of imaginary fear and risk scenarios but are overwhelmed by them nonetheless. Generally, they understand that much of the climate surrounding fear and risk is socially and culturally constructed, but admit that it is nearly impossible to escape it. As Nirit commented: "I know that in all likelihood, nothing will happen to her. It's a five-minute walk from school, but we have no lack of horror stories. The media do a great job creating panic." These parents explicitly discuss their struggles between "fear of risk," that provokes "a primeval instinct to protect" (Meirav) and "the will to let go," which "too often feels irresponsible" (Hadas). By contrast, authoritarian parents are generally unaware of the discursive construction of fear and risk. They perceive risks as a *fait accompli* and therefore believe that their fears are justified and warranted, and that they are responsible for addressing them appropriately. Authoritarian parents embrace prevalent discourses of risk and participate in the politics of fear, as depicted in the literature: "It would be stupid to deny the role of these apps in preventing tragedies. Too many pedophiles are out there. Call me hysterical, but I'm not taking risks when it comes to my kids" (Tamar) or: "Some call it panic, I call it responsible parenting. We didn't make it up. It's all over the news, every day. Do we need more proof?" (Liat). Parents' views of fear and risk guide their perceptions of care, safety, and protection, that are then translated into surveillance practices.

### *Perception of care, safety, and protection*

All participants, regardless of their parenting styles, appear to value care, safety, and protection as uncontested parental duties and, more specifically, as the ultimate aims of parental surveillance. Authoritative families perceive them as *joint practices* that parents and children define and redefine in a conjoint and continuous process, whereas authoritarian families consider them to be *parental tenets* that should be carried out on children unidirectionally and with a healthy measure of paternalism. Such differentiation between *practices* and *tenets* reflects the disparity between pragmatic and idealistic approaches. While authoritative parents endorse a relatively pragmatic approach according to which

care, safety, and protection are important but should be pursued reasonably and moderately, and not at any price, authoritarian parents understand them as ideals that can and should be accomplished to the fullest, partly because they believe in the absolute power of technology.

For example, one pragmatic mother told me: “Of course I want to protect my children! Who doesn’t? But I’m also realistic and understand that I can’t control them completely. I do what I can and what all of us find acceptable” (Na’ama). Hagar also said: “It is an issue. I won’t tell you it’s not, but we always talk in an effort to meet one another halfway. We both compromise. [ . . . ] The app is not going to solve all our problems anyway, right?”

Less pragmatic participants said: “I’m the parent and it is my job to make sure they’re safe. Protecting my kids is pretty much my purpose in life, so I’m gonna use what I can—and I can—to achieve this” (Efrat). Einat made it clear that “not everything should be democratic or negotiable. Friends make sure you’re having fun; parents make sure you’re safe.”

### *Patterns of familial communication*

The sixth criterion distinguishes between authoritative and authoritarian families according to patterns of familial communication. Findings point to an interplay between parenting styles, family communication patterns, and surveillance climates. As expected, authoritative and authoritarian families tend to adopt conversation and conformity orientations, respectively. These orientations also coincide with approaches to general media use by children (e.g., TV, video games, and computers). For example, authoritative families with a conversation orientation “rarely discuss TV watching in terms of screen time limits” (Nirit) but rather negotiate about “appropriate content that both children and parents would be ready to accept” (Shula). In these families, children commonly own their smartphones, enjoy high levels of agency with regard to shaping their own surveillance, rarely resist parental surveillance, and become involved in shaping familial perceptions of care and protection according to their parents’ relatively pragmatic, realistic, and critical understanding of fear, risk, and safety:

We don’t tell them whether and how often to watch TV or play video games, but media and screens are part of what we talk about during family meetings. We also talk about our relationship, or what you call surveillance. It’s funny to think about it that way, I have to admit (Na’ama).

By contrast, authoritarian families encourage a more conformity-oriented climate in which strict rules are set to limit children’s media consumption. In these families, children are subject to constant threats of confiscation of their smartphones; they have little agency in shaping their own surveillance, and their frequent attempts at resistance are thwarted. Such behavior is the result of parents’ uncritical approach to fear and risk that guides their paternalistic perceptions of care and protection. As Sharon put it: “She won’t watch too much TV or enjoy unsupervised access to the internet. We track her online behavior as well as her offline whereabouts through *GogoMe*, just to protect her.”

The interplay between familial communication patterns, approaches to general media use, and surveillance climates suggests that surveillance is becoming a part of family media ecosystems. In this sense, familial communication patterns are at least partly responsible for families' approaches toward surveillance technologies and their congruent attitudes toward other media.

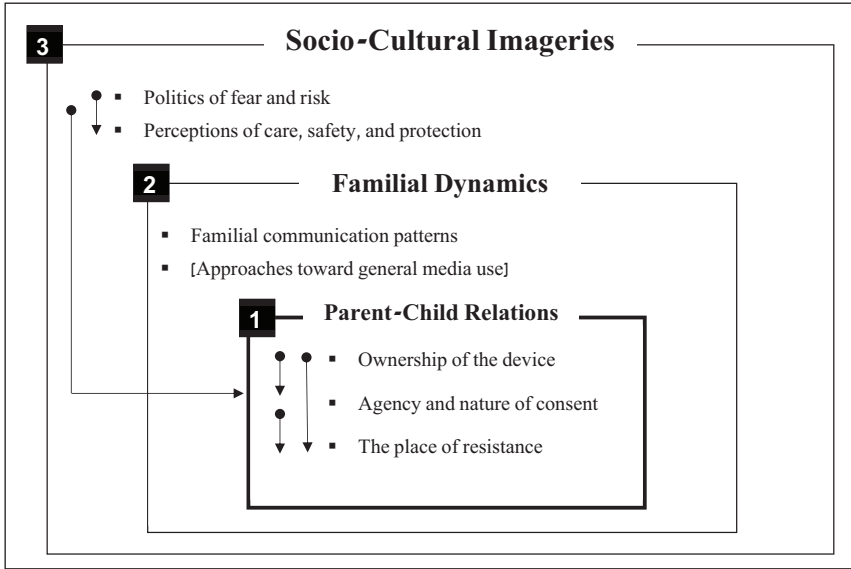
## Concluding discussion

The findings of this study have shown that surveillant parents have different parenting styles, thereby challenging the presumption that parental surveillance, or lack thereof, is characteristic of specific parenting regimes. Alternatively, parenting styles guide familial surveillance climates responsible for shaping the scope and form of surveillance. The following discussion aims to explain how the six criteria presented in the previous section define familial surveillance climates, thus demonstrating the multidimensionality of parental surveillance.

In the previous section, I introduced six criteria that define familial surveillance climates: (1) Children's agency and the nature of consent; (2) ownership of the surveillance device; (3) the role of resistance; (4) politics of fear and risk; (5) perceptions of care, safety, and protection, and (6) patterns of familial communication.

These criteria can be reorganized as a three-tier scheme, representing micro-to-macro contexts of surveillance climates (see Figure 1). The first core tier consists of Criteria 1–3—children's agency, device ownership, and the role of resistance—that together describe parent–child micro relations with regard to intrafamilial surveillance. These criteria maintain essentially linear relations, because ownership of the phone determines children's agency to negotiate their own surveillance, both of which influence children's need to resist. This first tier, offering a practical description of the immediate factors affecting intrafamilial surveillance practices, is shaped by the other two tiers. Tier 2 refers to broader familial dynamics, such as communication patterns. The interviews attested to the importance of familial communication patterns (conversation vs. conformity) in determining Tier 1's components (ownership, agency, and resistance), and also provided preliminary evidence for the relevance of the familial approach to general media use. The intentionally broad title *familial dynamics* assumes that various intrafamilial relations, that should be mapped and explored in future studies, might affect the micro relations described in the first tier. Tier 3 appears to be even more important in shaping parent–child relations. It refers to sociocultural imageries, and more specifically to the extent to which parents criticize or embrace prevalent (constructed) discourses of fear and risks, which then mold their perceptions of care, safety, and protection. These external imageries appear to be highly influential in guiding parent–child surveillance-specific relations, such as levels of agency attributed to children.

The three tiers define familial surveillance climates, thus demonstrating the multidimensionality of parental surveillance resulting from the complex interplay among socio-cultural ideas, broad familial dynamics, and parent–child surveillance-specific relations. In other words, parental surveillance is not a unidimensional enactment stemming from parenting styles. Alternatively, parenting styles are a common thread running through and across the three tiers. This observation is not limited to the simplistic statement that strict parents track their children whereas more permissive parents do not, but rather



**Figure 1.** Familial surveillance climates: A three-tier model.

establishes that each tier and component is interpreted and adapted according to parents’ positions along the demandingness–responsiveness axis.

The primary argument of the paper suggests that parenting styles are important in determining familial surveillance climates rather than the presence or absence of parental surveillance. This argument implies that parental surveillance is no longer an exceptional habit associated with abusive parents or strict disciplinary regimes, but an increasingly prevalent practice. Information and communication technologies have become integrated extensively in our everyday lives and routines to the extent that use of surveillance technologies is not necessarily attributable to what they represent (surveillance ideology) but to their practicalities, in the most mundane and non-ideological sense. In other words, surveillance technology use does not reflect a particular parental ideology so much as it expresses the pervasiveness and usability of new technologies in contemporary realities. Parental ideologies—practically translated into parenting styles—operate alongside other factors to create familial surveillance climates.

By challenging the link between parental surveillance and strict parenting styles, this study does not legitimize or support parental surveillance, but rather acknowledges its growing prevalence and ubiquity as a first step toward a more nuanced understanding of different familial surveillance climates. Such understanding clarifies that parental surveillance is not someone else’s problem, consequently illuminating “softer,” more participatory ways to carry it out.

*Limitations and future research*

The study has two main limitations: First, it focused on mothers, who stated explicitly that their partners are not as involved as they are in decision-making regarding family

surveillance practices. Future studies might examine differences between mothers and fathers to determine whether and how they can be integrated into the suggested model, adding a gendered dimension to familial surveillance climates. Second, it examined surveillance achieved through location-tracking smartphone apps alone. Hence the suggested model's applicability to other types of parental surveillance should be tested in future studies, possibly requiring adjustment of several criteria. For example, when addressing the monitoring of children's online behavior as a specific type of parental surveillance (e.g., through personal computers), ownership of the surveillance device might be challenged by asking children to reveal their passwords. Subsequent studies may thus continue development of the suggested model to increase its applicability. It should be noted that the suggested model addresses parental surveillance in isolation. Future studies may benefit from examining the interplay between parental or intrafamilial surveillance and surveillance conducted in other meaningful spaces such as schools.

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### Supplemental material

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