. Intergenerational narratives with tracking

There is a different emphasis on surveillance with the involvement of known others within the household, which shifts health discourse away from individual discipline and toward life narrative in the context of relationships and responsibilities within the home.

In focusing on households, naturally, generations were a critical lens through which to understand the meaning and effects of health, health technologies, data, and related support methods within the households during the pandemic. The pandemic presents a period of significant uncertainty and change during which households observed varying response levels from global, national and local organisations. This period of change impacted different generations differently, as some were advised to shield or be locked down at different times and were subject to differing health advice.

The discussion in this chapter is based on case studies from different households. The goal is to draw out the intergenerational interactions within households to identify various individualised health narratives that participants used to strengthen and sustain links between generations, where older members were equally engaged with tracking practices. While generations are frequently viewed as a source of differentiation, the intergenerational responses to tracking and accounts from the case studies reveal their relational nature and the points of connection between their health experiences.

Despite interest in online tracking communities as a communicative and consumerist concept (Crawford, Lingel and Karppi, 2015; Barta and Neff, 2016; Sharon and Zandbergen, 2017; Didžiokaitė, Saukko and Greiffenhagen, 2018b), there has been relatively little research exploring how different generations engage with tracking

technologies. A small number of studies have explored mobile health technologies and the self-tracking of older adults (McMahon et al., 2016; Caldeira and Chen, 2019; Jaana and Paré, 2020; Jin et al., 2020), where age has been used to identify similar attitudes and behaviours concerning health monitoring. Nevertheless, there has been very little study devoted to intergenerational tracking behaviours and how people from different generations make sense of tracking and discursively construct health narratives together. In thinking about health 'identity' and social support questions (RQ3 and RQ4), I focused on the embeddedness of connections within the households – including the moments when these were shifting (in the sense both of the time-of-life narrative and physical presence within the home) and as relations of symbolic and material processes. In this way, it was possible to think about how tracking practices (symbolic and material) provided a point of focus for people of different generations living together, and about how people can employ tracking as a way of (re)constructing health narratives within the net of family commitments, work roles, perceptions of government, and global crisis and, finally, as a new source of support. This is not to suggest, of course, that tracking is the only way these households construct their narratives about health, or that particular narratives about tracking and health are necessarily coherent with other relational connections which individuals seek to locate themselves in or identify with. The short case studies are not intended to be read as representative of tracking households in general but rather to highlight the kinds of intergenerational relations and social processes that interacted with the themes analysed in the study. In presenting a detailed and intimate picture of the three households, it is possible to demonstrate some of the more complex ways that intergenerational tracking practices and health identities could be negotiated and enhanced.

Case study one: Negotiation

In a detailed review of self-tracking community relations, Kristensen and Ruckenstein (2018, p. 3624) question the extent to which, and the manner in which, lives are technologically mediated and modified in a way that suggests:

techno-mediated selves fit into larger structures of the digital technology market and the role that metrics play in defining them [...] Device makers have never before been so intimately and parasitically involved in the shaping of daily lives, not only in their urging that people measure themselves but also in feeding those measurements back to them in order to make the measured accountable to themselves. Technologies invite people to engage with their emergent self—as they seek to know and improve their lives—and re-fashion themselves with the aid of metrics.

Therefore, the authors claim, to gain a fuller understanding of how self-tracking influences self-exploration and intentionality around health, we need to pay more attention to processes of self-experimentation and discovery. This argument strongly resonates with those of other self-tracking scholars (Lupton, 2017a; Pink and Fors, 2017; Didžiokaitė, Saukko and Greiffenhagen, 2018b) working on the everyday experience of tracking and monitoring health that more attention needs to be paid to affective elements in the context of health, illness and healthcare. They point out that little research has sought to integrate or consider self-tracking as profoundly emotional and sensory experiences. I would add that the support networks woven through those emotional and sensory experiences have also largely been overlooked, with the exception of Hjorth and Lupton's (2021) study of digitised caring intimacies in Japan.

The importance of the negotiation of health between household members, particularly the interlacing of intergenerational connections in shaping tracking

practices and, therefore, influencing health behaviour in the household, is evident from the Paterson household's tracking practices. The Patersons live in the United Kingdom. Rachel Paterson (fifties) is a software programmer, and her partner, James (forties), is a fashion executive and teaches at a university in the North East. They have one daughter, Jocelyn (late teens), who is running her own business from home. They live with James's father, Aaron (sixties), who manages a construction company. Eight years ago, Aaron had a heart attack and started to use various technologies to monitor his health. He was initially motivated by a moment of health crisis and by a school project led by Jocelyn about health tracking. Jocelyn recalls being 'scared' about her grandfather's health, and Rachel and James decided to move from London to live with him. They were also sensitive to the need to support Aaron because they recognised that health is heavily influenced by support. They were aware from popular stories about ageing and wellness that health tracking can significantly improve and change health behaviours. As a household, they sought to negotiate a set of health behaviours. The Paterson's acknowledgement of emotional influences on their health behaviour underscores how tracking practices became integral to intergenerational social relations and health identity formation in other spaces (in this case, social media).

Aaron: I'll be blunt; it was a scare. I was worried that my heart attack was going to be the end of my life. Ka-put. The end, right. It mainly was lifestyle stuff, so the doctor said. I'd lost my wife a few years before and put on a bit of weight and not been looking after myself. At the time I was so used to eating a kebab and having a beer I couldn't really imagine doing anything else, you know you prefer not to think about the consequences of your actions [...], but then I had me heart attack and everything I decided after that, you know, has woken me up to more real experiences. I don't want

anything to happen to me. I want to be here for Jocey [...] obviously me heart attack was the beginning of all the health stuff. But I wouldn't do it unless I wanted to. I've got really into my tracking. Jocey and I go for a run every week together, and we compare notes and joke that I've a body of a 20-year-old.

Believing that Aaron would not stick to the health recommendations of his health consultant, Rachel and James encouraged him to take a 'proactive' attitude to his health and to talk about his experience with Jocelyn. Initially, Jocelyn was fearful that Aaron would have another heart attack and got very upset when Aaron would try to eat or drink something not on his diet plan. Persuaded by his family's multiple points of support and intervention, Aaron began to introduce different ways to track and monitor his health. Through this process of emotional persuasion and negotiation (evoking Hjorth and Lupton's (2021) observation of the importance of family 'kinship' expressed through digital health interactions), the household's methods of sharing and supporting health change were eventually reconciled through the shared uptake of tracking, as Jocelyn explains:

Yeah, well, gramps gave us a scare. I was terrified [...] when it happened we'd been doing a project on 'health at home' at school and the different ways you can monitor health and diet. I got really interested in it, and my mum bought me a FitBit so I could track my running. I came to see fitness tracking as something fun to do and thought gramps could use it too. I felt that if we did something together, then, you know, he'd probably be ok. So I just remember that after we all moved in together, we started using FitBits together. I got a bit nervous at first because I thought that gramps wouldn't be interested in it. I remember persuading him by asking if

he could try looking after his fitness with me and giving him the FitBit.

Aaron, a semi-pro swimmer player in his twenties, adopted self-tracking practices as a result of the initial health scare and the different ways in which his family helped to inform health behaviour change. Aaron later reflected on how fitness tracking had had a 'positive impact on his health and wellbeing' and how he felt 'fit again'. Likewise, Rachel and James partially located their health narratives as a reaction to Aaron's heart attack and how they decided to negotiate health within the household.

By deciding to adopt fitness tracking, Jocelyn and Aaron shared a new form of identification, locating themselves within a narrative of health and fitness which they choose to share and develop together. In turn, Rachel and James also located the rest of the household within a narrative of health negotiation in terms of the ways in which they could change behaviours together. Thus, the experiences of the Patersons demonstrate the different ways in which practices are taken up within the home and the tracking efforts that benefit from intergenerational links (Binda et al. 2017; Li et al. 2020; Hjorth and Lupton 2021).

Case study two: Experimentation

In the previous chapters, we covered the kinds of physical, social, and consumptive tracking performance (see in particular Chapters 2, 4 and 5). Within households, we can think of each member as a unique participant in the ongoing re-creation of social ties and actions. Each member is a consumer of different health practices. In the foreground, primarily younger household members were championing health tracking; typically, these members are the pioneers, adopting new tracking innovations and informally instructing others – especially older members – of the potential benefits.

In this case study, we focus on the Riccis, who live in Italy. Luca (20s) and Sofia (20s) live with their grandparents Laura and Roberto, who are both in their 70s. Luca is a full-time chef, Sofia a fashion business owner. Before the pandemic, Luca worked shifts, 4 pm – 2 am, and Sofia was working from a workshare above a friend's retail business in the city. Laura and Roberto are very active and go for daily hikes and swimming. The household was very fluid in the timing and spatial dynamics of their social interactions. After the first wave of lockdowns in Italy, the family had meals and spent time together regularly. The Riccis' household dynamics were impacted directly by new health tracking practices. While Luca and Sofia noted a passing interest in health tracking, Laura and Roberto took on the role of advocators. Before the local restrictions, Laura went swimming at 4.30 pm every day. Tracking swimming times and distances was Laura's first experience with fitness tracking technologies. During the lockdown, Laura and Roberto set up a local tracking group with a leaderboard to compete against neighbours during periods of self-isolation. Roberto shared how he had 'got his steps up' by using the stairs at home and a fitness rebounder. Laura and Roberto's enthusiasm for tracking also shaped Luca and Sofia's sense of health identity. Prior to lockdown, both would regularly socialise away from home and were not interested in fitness routines.

Luca: I have a very intense job. I don't have time for the gym or for socialising like my friends do.

Sofia: I prefer to bury myself in my work. I'll often work late, and I haven't really been thinking about my health or taking care of myself. So since the lockdown started four months ago, I am thinking a great deal about my own and my family's health. Nonna is very passionate about her health and her routines. I know that she is fitter than me!

Luca: Right. Nonno has asked me to join the local fitness group he has set up. When I miss the intensity of work, it's a nice distraction to focus on something else. It reminds you in the scary moments that there's funny, even inspiring moments too.

Sofia: That's right. I feel more involved with my family than before.

These household-based fitness activities and new tracking information sources had a profound effect on Luca and Sofia's attitudes to health. Speaking to both a few months later, Sofia had adapted her business to start to design clothes for fitness influencers. Luca had started experimenting with new health-based meals that he could prepare in the restaurant. Both had started to track their fitness daily. Thus, in a short time, there were profound changes in daily routines and habits and relationships between health and a shared sense of self. Luca had started a food tracking diary to inspire different kinds of meals and ingredients, demonstrating how changes in the narratives of health identity within the household were also located outside the home, affecting his professional role and how he constructed his narrative of health. In turn, Sofia's professional design practices influenced her shared forms of identification outside the home – most notably her interest in fashion, which has shaped her professional interests, her employment and social networks.

The influence of Sofia and Luca's grandparents inspiring interest in and adopting tracking contrasts with the younger profile of the most enthusiastic self-trackers and pioneers of health technologies found in previous studies (Gerhard and Hepp, 2018; Paluch and Tuzovic, 2019; Hepp, 2020). However, there remain similar relational practices, including experimentation, social configurations that support tracking, and the impact of societal discourses about the self. The appeal of experimenting

with health data is perceived not simply as a function of tracking but also as a way for individuals to express information about their level of fitness or health identity. Trackers foster a playful interaction with digital health technology. Such activity helps them not only to achieve their goal of understanding their personal health, but also to make sense of their own interaction with these technologies (Hjorth and Lupton 2021).

Their sharing of tracking practices locates the Riccis within a shared narrative of household identity as a family and introduces ways to connect to health information. Indeed, as the periods of lockdown became more prolonged and more frequent, the Riccis, along with other households, placed greater emphasis on tracking activities as a means of imagining life as 'back to normal'. In experimenting with different forms of tracking (food, meditation, fitness), each household member constructed their narratives of health identity, which were firmly rooted in their personal interests and, for Luca and Sofia, their professional roles outside the home.

Case study three: Surveillance

In the final case study, we examine the context of forms of self-surveillance and how intergenerational relations enhance different life narratives around health. Much of the self-tracking literature has looked at a particular type of individualised tracking practice that is most commonly linked to online fitness communities – although a notable exception is Will et al'.s (2020) study of intimate relationships and care practice between adult partners. Routes through individualised self-tracking practices have obscured the interconnections between the physical context of home and other sites of health reproduction, including social media and health app interactions. Up to now, the concept of self-surveillance has been in the background of the wider healthy living tracking practices performed by the households. While it is clear that involvement in tracking should not be equated with a healthy lifestyle

and methods of living well, responses to health crises see a potential over-emphasis on health self-surveillance (see, Will et al., 2020). In conducting this research, I suggest that tracking opens up new health opportunities within the home that protect against health anxieties. Tracking enables surveillance in the form of health data and other forms of performative behaviour and interactions on social media and health apps. In relation to the work of Foucault, health tracking is a form of discipline, evident in the emerging 'gaze' of tracking using devices which push data automatically into apps and are visible to others (Fotopoulou and O'Riordan, 2017; M. M. Hardey, 2019; Esmonde, 2020; Fors et al., 2020). There is a different emphasis on surveillance with the involvement of known others within the household, which shifts health discourse away from individual discipline and toward life narrative in the context of relationships and responsibilities within the home. Surveillance was observed most often not as a form of self-regulation, but in the context of the involvement of others and new health practices shared between generations. The narratives below of Esme, William, and Mallory, at different life stages and living in different households, illustrate some of the processes of health transformation in connection with which tracking practices in the home were modified and refined, becoming an important part of life narratives in the way they were performed as self-surveillance.

Esme

Deeper narratives connecting an individual's personal health with that of close loved ones have been overlooked in tracking studies, which have tended to emphasise the importance of moments of health transformation experienced by the individual. Daily health practices can become a way to feel some reassurance while coping with significant health change and uncertainty (particularly the degree to which people felt alarmed by the rising global infection and death rates of Covid-19). Esme, a woman in her 70s living with three generations of family in Spain, talked about the

rude awakening in terms of an immediate threat to her health and construction of health identities in the home. Esme lost her life partner, Ana, to Covid-19 and shared how Ana's death has changed the way she constructs her own life narrative – from a being social 'being in a partnership' to 'alone' – and emphasis on health practices.

I've gone through a lot. When Ana and I were together, we explored and conquered the world together, and I lived in a happy bubble. Today, living with my family, I feel very grounded, and I'm aware of how much I've changed since the pandemic. I hear people my age giving up, going on about how they're going to die anyway, and acting as if nothing matters any more. So I tell them, 'Fuck off!' It is never too late to adopt a new way of life. Starting over is proof of that. I'm here because of a loss, and I've had to seriously reconsider my life. And the thing about health now is that you have so much more control over it, don't you?

I tell my daughter-in-law about how she's doing with her running, and we compare our health stats. And the thing about the pandemic is that it is entirely up to us to take care of one another. I can't expect them [the government] to look after me if I don't know how to look after myself and make sure my family is also looking after themselves and me.

Though Esme's observations start with the death of Ana, she also describes the interconnected way in which she has shifted her sense of life narrative with a new set of life priorities. Such a shift is evident in how she actively takes care of herself and how the same level of care forms part of other relationships. For Esme there is a degree of self-surveillance concerning her sense of autonomy and responsibility

compared with others of a similar age. Esme's experience also reads as a form of liberation – 'a new way of life'.

In other parts of her interview, Esme describes her involvement with her family in reciprocal self-care methods – for example, sharing health data. Surveillance, therefore, forms part of the joint health projects and practice in Esme's household, motivated by a mutual concern to look after each other. Self-surveillance and the opportunity for self-reflection also form part of Esme's shift in life narrative. The tracking surveillance presented here as woven into new identities and health practices calls into question, therefore, interpretations that rely solely on health disciplinary strategies. For Esme, she is also responding to significant change in her intergenerational relationships and her family's interest in her health and wellbeing in the absence of Ana (Hjorth and Lupton 2021).

William

William is a businessman in his 40s living in France, with his parents and brother. During the pandemic William moved back into his parent's house. When William's brother, Callan, became unwell with Covid, health monitoring became the focal point of tracking because multiple people were involved with his care. William observed how he became more embedded in health monitoring practices and within a health narrative 'not of my own making', as he describes below.

I believe that anything we can do for Callan is beneficial to both him and us. Callan tested positive for Covid eight months ago and is still not 100 percent today. My parents are getting older and are more concerned about their health. They've both had Covid and have been fine, thank god. Callan has taken the blow. We monitor him at home together, and we keep an eye on each other. It's not for bloody social media points, or whatever people talk about,

that's just not the same. We're not aiming for a spot on a leaderboard. We're not going to post Callan's blood pressure on Facebook because [tracking] has become a part of our daily routine. 'Give us your arm, and I'll check this and that'.

Such close observation of a loved one reflects aspects of health surveillance. At the same time, however, joint efforts by the family to monitor Callan's health and, as discussed in later interviews, their own health underlined the importance of shared practices and knowledge in such surveillance. While neoliberal interpretations would highlight the individual and voluntary compliance with this kind of surveillance, the formation of such self-monitoring practices also points to shared and co-constructive forms of health narrative. Callan later explained that being monitored was 'weird at first', but it also gave him 'something to live for' and allowed him to 'feel connected' with his family. Callan's experience shows how selfsurveillance is not solely about health but is also about encouraging self-observation and opportunities to connect with others. Where previous surveillance studies emphasise goal achievements, other achievements take priority, such as mobilising reflexivity and the manifestation of new health narratives shared by household members. Indeed, while Callan's health needs were felt to be the most pressing in the household, there was no clear sense of a divide between enactments of care and being cared for, and neither William nor Callan mentioned the role of a 'carer'. The subtext here reveals the mutuality of surveillance. In this context, the ways that tracking was negotiated by intergenerational expectations of healthy living and recovery from illness were complex. Again, this shows how surveillance combines with health practices in households and responsibility for maintaining health as something beyond individual self-surveillance strategies (Will et al., 2020). Furthermore, there is no single principle guiding the development of surveillance practices in tracking, but rather a multitude of motivations, principles, and subjectivities in which behaviours frequently overlap and, in some cases, contradict

each other. Surveillance has in turn been influenced by the intergenerational links and the opportunities for health narratives within the household.

Mallory

While the intensity of surveillance practices has changed over a linear period of time for William, Mallory's household and methods of health monitoring fluctuated between different days of the week. The importance of recognising the multiplicities of time and physical space is evident in Saukko and Weedon's (2020) account of self-tracking practices at work where workers preferred not to track at home.

Mallory and her partner Christine are women in their 40s, living with Mallory's elderly aunt Naomi, in her 90s, and Christine's son, James (20s), in the United Kingdom. Mallory is a frontline worker and works shifts, including evenings and weekends. When Mallory is at work, tracking has no other meaning than to 'record steps'. As a result, Mallory cannot be bothered to observe (and does not have the energy to once she has finished work) and take notice of tracking notifications. Mallory impulsively observes her family's health notifications that they share together on a health app.

I'll switch from ignoring my health notifications at work to looking at what everyone else is up to [...] It's more interesting to see someone else's data [...] It's funny, I hadn't really considered it before, but I guess I crave the connection when I'm not with them. So, yes, you could say I'm checking in on them, but I also want to know how they're doing.

On days off at home, Mallory's tracking patterns are transformed. Tracking becomes a social activity rather than a means to 'check on' family members. Mallory, Christine, Naomi and James take part in meditation sessions together, enjoy sharing

their health experiences and make time to understand their health data, as Mallory explained:

On days off, I'll start the day with a group meditation, or I'll join friends on Zoom. I mean, I can see the appeal of tracking. I notice a sharp contrast between my automatic tracking at work, which I mostly ignore, and how I put in more effort when we're together. I believe that finding ways to do fitness routines together is important, but so is sharing progress. It's not the same as obsessively going to the gym on your own. I believe that sharing about your health in this way [tracking] is more enriching and social.

In this case, self-tracking fostered an ease with health monitoring which occurred as subtle modes of surveillance in that the emphasis shifted to social, rather than data, outcomes. Such easiness was further emphasised by a sense of empowerment and anticipation of the enrichment of health monitoring practices. The spatial dynamics of health monitoring also change when there are collective tracking practices, as the household members make the effort to enact health behaviours and fitness routines together, rather than individually going to a gym. Shared fitness activities are therefore an important part of how Mallory's household encounters and moderates behaviour around tracking and signify a change from singular health monitoring to socially enacted engagement.

The narratives of Esme, William, and Mallory shed light on the fluid composition of tracking within households, demonstrating how significant life events (such as Esme's loss of her partner Ana) and multiple uncertainties surrounding health (either as a result of recent health events and/or a sense of pandemic panic) can lead to different surveillance practices and health narrative formation. As each narrative demonstrates, the connections between various forms of health monitoring and

experiences shared among household members have a strong influence on the nature of the physical space of the household. To return to the context of intergenerational relationships, tracking is used to help understand various health data – often used as an extension of care – of different household members in the most practical applications. More subtle forms of surveillance combine social-fitness activities with space for various conversations about health data. When participants shared their experiences in this manner, they rarely reported feeling subjected to invasive or coercive surveillance. This is significant when we consider that all households were involved in some way with government health monitoring for Covid-19, in which individuals were encouraged to take responsibility for their health.

Though this is a small sample of households, such accommodations for health surveillance are likely to be more readily accepted by these households where tracking practices are already in place. As a result, future government health tracking initiatives should consider household dynamics and move away from the individual conformity of a health audit culture.

Future research: Intergenerational tracking

Compared with other tracking studies, this one provides detailed accounts of tracking from the perspective of a broader range of family configurations and experiences, involving partners or significant others and other family members in the same household. However, there is a significant opportunity to build on recent work considering inter-relationships around tracking, particularly in cases of parental care (Thornham, 2019), a group rehabilitation setting (Schwennesen, 2017), in the context of family-care support structures (Mishra et al., 2019), or in relation to the methods used to maintain group tracking practices (both online and offline) (Meng et al., 2017).

Future research could also report on the impact of health tracking technologies on relationships within the home, especially when activities involve shared interactions within the physical social spaces of households and an element of live streaming, in which tracking may be incorporated into or purposefully kept separate from health routines. Health tracking in the household constantly introduces new patterns of tension due to the coexistence of established and new routines and varying levels of health and technology knowledge. This interaction serves to highlight the actors' negotiations between different technological options, as well as between health roles and responsibilities.

Conclusion

Will et al. (2020) have argued that researchers need to pay more attention to the practices of tracking that form part of existing healthy living interactions and to the relational terms in which tracking takes place. The case studies presented here offer not only new perspectives that enhance such a relational context but also help to go beyond a singular set of motivations for health monitoring, showing how intergenerational intimacies, particularly around routines of care or aimed at helping to appease health uncertainties, are woven together in the everyday negotiation of health tracking and other health practices. It is clear that the combined attentiveness and intimacy drawn from family relations appeals to collective responsibility for maintaining health (Hjorth and Lupton 2021) – in the case of Esme's grandfather, as something he felt he 'owed' his family. In this chapter, I have emphasised negotiation, experimentation and surveillance as important ways in which intergenerational relationships have a key role in adapting or changing tracking behaviours. This might involve tracking at the same time, checking in with each other when outside the home, or discussing health more broadly in relation to personal health data. In this regard, intergenerational relationships allow

households to manage health uncertainties or to directly address a particular health topic together, and might help other households move towards more persuasive and effective tracking practices.

Recommended reading:

Ajana, B., 2018. Communal self-tracking: Data philanthropy, solidarity and privacy. In Self-tracking (pp. 125-141). Palgrave Macmillan, Cham.

Barta, K. and Neff, G., 2016. Technologies for Sharing: lessons from Quantified Self about the political economy of platforms. Information, Communication & Society, 19(4), pp.518-531.

Lupton, D., 2016. The diverse domains of quantified selves: self-tracking modes and dataveillance. Economy and Society, 45(1), pp.101-122.

Pink, S. and Fors, V., 2017. Self-tracking and mobile media: New digital materialities. Mobile Media & Communication, 5(3), pp.219-238.

Will, C.M., Henwood, F., Weiner, K. and Williams, R., 2020. Negotiating the practical ethics of 'self-tracking' in intimate relationships: Looking for care in healthy living. Social Science & Medicine, 266, p.113301.