

Article

# Domesticating Technology in Pandemic Social Work

by

Anne Wullum Aasback

PhD Candidate

Department of Social Work, Norwegian University of Science and Technology  
Norway

E-mail: [anne.w.aasback@ntnu.no](mailto:anne.w.aasback@ntnu.no)

Nina Helen Aas Røkkum

PhD Candidate

Department of Social Work, Norwegian University of Science and Technology  
Norway

E-mail: [nina.rokkum@ntnu.no](mailto:nina.rokkum@ntnu.no)

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**Abstract**

On March 12th, 2020 the Norwegian government announced what later became known as 'the lockdown' of Norway due to the outbreak of COVID-19. This led to major changes in society, in which social distancing became the 'new normal' in everyday life. For social workers, this meant adapting to 'new' social problems among vulnerable groups, as well as comprehensive changes in their working conditions and interactions with clients.

Many social workers communicated with clients on digital platforms before the pandemic, but Norway's COVID-19 social distancing policies changed the terms for using these platforms. This article investigates the impact of the pandemic on the ways Norwegian social workers involve themselves with digital technology in their interactions with clients. We employ domestication theory to investigate how social workers shape and navigate these new circumstances triggered by the pandemic, using a three-dimensional model that includes practical, symbolic and cognitive levels of analysis.

The data underlying this article consist of 16 semi-structured interviews with social workers from seven different social services in Norway. The interviews were conducted approximately one month after the lockdown. The digital transformation within Norwegian social services, together with the changes related to the pandemic, has created new ways of practicing social work. One of the key findings concerns how social workers co-produce and adapt the use of technology to what they believe is important in interactions with their clients. In this adaptation, they seek to preserve core values related to social work practices and professional development. The changes in working methods and approaches due to COVID-19 restrictions have also challenged the traditional understanding of roles and priorities underlying social work practices. In this process, new ways of digital interactions were developed.

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## **Introduction and research questions**

In this article, we investigate the impact of the pandemic on the ways Norwegian social workers involve themselves with digital technology in their interactions with clients. COVID-19 spread globally in a very short period of time, and quickly developed into a pandemic. This led to entire cities and countries being locked down, quarantines and social distancing, and suspended trade and infrastructure. On March 12th, 2020, the Norwegian prime minister announced what later became to be known as 'the lockdown' of Norway. All kindergartens were closed for children unless their parents worked in critical sectors. All schools and universities closed, and moved their classes to digital platforms. Employees in the private and public sector who had the opportunity to work from home were strongly advised or required to do so. Restaurants, gyms, football courts and most public spaces closed.

The expanding pandemic was met with comprehensive measures by the Norwegian authorities. International media reports showed overfilled hospitals, though this was not the case in Norway. The Norwegian government's measures hindered the virus from spreading at an early point, but at what cost? Unemployment rates exploded in just a few weeks (NAV, 2020). Vulnerable children and families isolated at home became a hot topic in the news. Social distancing policies and the national lockdown brought extensive challenges to the social work profession. At the same time, the national guidelines related to social distancing limited the possibilities for traditional face to face encounters, and forced social workers to find other, often digital, solutions.

Together with the other Nordic countries, Norway has been at the forefront of developing new ways of interacting with its citizens online and on building digital governance structures (OECD, 2017). Digital technology is not a new phenomenon in social work practice. Since the 1980s, different types of system management tools have been used to help organize field notes, keep track of clients and support case management (Hill & Shaw, 2011). For many Norwegian social workers, the possibility of communicating with clients on digital platforms was an opportunity even before the virus outbreak, but the social distancing policies changed the terms of- and need for using these platforms. In this article, we investigate how the pandemic has impacted the ways Norwegian social workers involve themselves with digital technology in

interactions with clients. We turn our attention to the following research questions: What characterized social workers' digital interactions with clients during the first months of the pandemic? What can be learned from their experiences with domesticating technology? How has digital technology supported, challenged and changed professional values in practice?

### **Data and Method**

The data underlying this article consist of 16 semi-structured interviews with social workers from seven different social services in Norway. We contacted potential informants soon after Norwegian society was locked down on March 12th, 2020. The informants were recruited through two different ongoing research projects related to client communication and digital interaction in social work, both previously approved by the Norwegian Centre for Research Data (NSD). We compiled an interview guide to explore social workers' experiences of interacting with clients in the pandemic situation, and, more specifically, we wanted to acquire insight into digital communication channels and the reasons why these were adopted. All interviews were conducted by the authors of this article.

The article is based on interviews with informants who work within social service organizations. Eight informants worked in social welfare and employment services for adults, whereas the remaining eight worked in child welfare services. Regardless of employer and mandate, the informants held various roles within their organizations. While some primarily held administrative roles and case management tasks, others met fewer clients and had a more therapeutic role. What they had in common was direct contact with their clients. Informants had been employed in their current workplace for more than a year, and had completed higher education. Most had studied social work, while others had studied health care, family therapy, psychology, pedagogy or social science as their main or additional education. Since our informants had varying educational backgrounds, we chose to use the definition 'social worker' as a collective term to define the informants. The sample mainly consisted of women between 25 and 50 years of age, which reflects the gender and age balance within their organizations.

We adopted an inductive approach to analysing the data, starting with transcribing the recorded interviews. The transcribed interviews were then assigned empirical codes closely related to what the informants said (Tjora, 2017). In this way, we made sure not to miss important nuances in the data. Many of the empirical codes were related to how social workers used and shaped the technology in their interaction with clients. This coding process laid the foundation for the refined research questions in this article. While the questions in the interview guide were primarily related to communication in the new situation, we found that the reasoning behind the informants' practices was just as central. Four overarching categories were then established in line with the research questions: 1) setting the scene for the digital transition; 2) availability in times of crisis; 3) building community through digital technology, and 4) quality of virtual interaction. The informants emphasized the flexibility in using digital tools, which led us to search for a theoretical framework that could assist in investigating this further. At this point, domestication theory was applied in the last part of the analysis. We then made coding maps related to the research questions within each of the features of domestication theory.

The interviews were conducted approximately one month after the lockdown, which we consider to be a strength of our data. At this time, social workers had to deal with several changes simultaneously. Due to the lockdown, they had been given new conditions and guidelines for their work, and needed to rethink their routines and practices to accommodate the new circumstances. We gained valuable insight into the social workers' experiences with these changes. In retrospect, we realize the importance of conducting the interviews at a time when Norwegian society was rapidly changing, and where workers had adjusted to the new conditions, but not quite cracked the code. Society is constantly changing, and we would not have gotten the same insight into the processes if we had interviewed the informants at another time. At any given time, such studies are snapshots of reality, with both the weaknesses and strengths this entails.

### **Theoretical Framework: Domestication theory**

This article helps shed light on social workers' ability to use digital technology in creative ways to safeguard values and support interventions. New platforms where social workers can interact with clients are continuously developed in different areas

of the profession (Granholm, 2016; LaMendola, 2019; Bullock & Collvin, 2015). This shows that digital tools of various kinds are an increasing part of the relational work with clients, which spreads into the domain of social work in novel ways. Recent research (i.e. Cook & Zschomler, 2020), including this article, shows that the pandemic reinforced this development. We draw on domestication theory to contextualize how social workers adopted digital technology to help support their interventions and interactions with clients.

Domestication theory is an approach within the interdisciplinary field of Science and Technology Studies, which describes the processes by which technologies are adopted or 'tamed' by their users. It is heavily influenced by Actor-Network Theory (ANT), together with theories descending from sociology of media and media consumption (Ask & Sørensen, 2019). Focusing on the user as a co-creator of technology, it asks questions like: Which processes are set in motion when new technology is introduced, and what characterizes them? How does new technology influence, and how is it adopted by, its users? What can we learn from the impact of new technology and what meanings are prescribed?

The term 'domestication' originates from domesticating wild animals, with domestication theory being a framework for investigating how technology is 'tamed' by its users (Sørensen, 2004). The process of domesticating animals is a two-way process, in which the animal adapts to the human world, but at the same time, humans and their way of living are influenced by the animal. Likewise, the 'taming' of technology is a process in which users are influenced by the technology itself, but also 'tinker' with the technology to better fit their needs and values (Berker et al., 2006). 'Tinkering' digital technology to avoid rigid systems and adjusting to everyday practices has been under the microscope within social work research on digital technology (Huuskonen & Vakkari, 2012). These 'workarounds' have been a way of handling information systems unfit for the tasks they are intended to support (Røhnebæk, 2014). This can be referred to as domesticating digital systems, creating meaning and making them fit everyday practices. This shows the flexible space each user may navigate within the scripted design of a digital solution, which was not intended by the designer of the system. In addition, domestication theory includes a more bottom-up perspective, in which the relationship between technology and

society is mutually constituted. In this way, social work as a profession influences technology, and technology influences social work.

During the process of domestication, technological artefacts<sup>1</sup> become associated with practices, meaning making and other artefacts in constructing the intersection of large and small networks. Sørensen (2004) refers to three main generic sets of features when it comes to the domestication of technology. Firstly, the process of domestication leads to the construction of a set of practices related to an artefact, while a second feature concerns constructing the meaning of the artefact. The last feature deals with cognitive processes related to meaning making and learning from practices. These features make up a framework to describe and investigate the social workers' digital interactions with clients during the pandemic. It also underscores the role of users in shaping the technology, which we emphasize in this article.

## **Analysis**

The pandemic situation limited social workers' traditional face to face encounters; however, at the same time, an extensively digitalized welfare state has created new terms for social work. The analysis primarily addresses the first research question: What characterized social workers' digital interactions with clients during the first months of the pandemic? Based on a careful coding, recoding and grouping of the analytical categories, we base the presentation of findings on four categories: 1) setting the scene for the digital; 2) the availability in times of crisis; 3) building community through digital technology, and 4) the quality of virtual interaction.

### *Setting the scene for the digital*

The measures implemented during the pandemic led to the temporary shutdowns of familiar social networks and institutions, such as school and leisure arenas, with several parents experiencing challenges in meeting their children's needs (Bufdir, 2020). Many children and young people experienced new challenges during social isolation when everyday life was turned upside down, as did those who normally did not need any additional follow-up. This concern was especially related to children

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<sup>1</sup> Technological artefacts are material objects made by human agents as a means to achieve practical ends. In this article, this term relates to the digital technology accessed and used by the social workers in their professional practice.

and young people with disabilities, children and young people from families where parents have limited Norwegian language skills, families with cramped living conditions and children with parents in families with high levels of conflict (ibid.). Children can be indirectly affected by challenges for parents generated by pandemic measures. For example, this may relate to parents affected by unemployment, which can lead to stress and financial worries within the family, and trigger psychological reactions such as depression, frustration, aggression and increased substance use. These families will have an increased need for various assistance and measures. In addition, these families were not necessarily known by the services in the past. Newly published statistics from the Norwegian police authorities showed an increase in violence against children of 36% from 2019 to the pandemic year of 2020 (NRK, 2021).

These challenges, which were exacerbated by the pandemic, posed new demands and expectations to the social workers who work with these families. Many of these were related to digital technology and virtual arenas, in which most of the encounters between social workers and clients now took place. Our informants entered the pandemic situation with different skills and technological artefacts available. The digital technology allowing them to communicate with their clients from a distance, and use digital support systems outside of their offices, was available to many social workers even before the pandemic. Being at the forefront of developing digital services in the governmental sector (OECD, 2017), Norway paved the way for mobile ways of working for public servants. All informants had access to laptops and remote access solutions, which made it possible for them to work from home when the social distancing policies were introduced. However, when it came to digital information systems and platforms that made communication with clients possible, the informants had unequal access to modes of digital technology.

While informants working in social welfare and unemployment services for adults had been able to communicate through chat messages on a digital platform developed especially for this purpose, the child welfare workers did not yet have this possibility. Whenever they needed to use written digital messages, the primary tools were SMS and chat apps on their mobile phones. The drawback with these tools is that they are not secure enough to communicate sensitive data, according to the General Data

Protection Regulation (EU GDPR) regulations and the data protection agencies (Datatilsynet, 2021). During the pandemic, the focus on privacy and security in handling sensitive data seemed to be toned down. One of our informants stated that, *'Privacy-related concerns became subordinated because we needed a quick temporary solution.'* When communicating digitally during lockdown, previous concerns about privacy became less important than providing services to clients. This shows how risks associated with the use of digital technology were considered less serious due to the lockdown, compared to the risk of not being able to provide adequate support for vulnerable families.

Video meetings were highlighted by most of the informants as the preferred digital communication channel during the time when social isolation became the 'new normal'. Depending on their employer's agreements on software and Information and Communications Technology (ICT) solutions and who they were to meet, informants used services like Google Hangouts, Google Meet, Skype, Zoom, Microsoft Teams or other less well-known video conferencing services. Although video solutions were available before the pandemic outbreak, only a few informants reflected on how this technology could benefit their work; as one of them recalled:

Before the coronavirus outbreak, our office had a goal that everyone should do at least one video meeting, and it felt a bit weird! We didn't think we were going to reach that goal. And then the coronavirus came, and everybody was having video meetings within the first week.

This quote illustrates the enormous changes that occurred almost overnight. Another informant also shared experiences of using video meetings to meet clients individually and in groups:

So, it was very ideal that we had invented [Google] hangouts. Before this, I would have just used the phone, but now we can actually meet several people together in a completely different way. So that was a bit like, 'Wow! This creates possibilities!'

This quote demonstrates how the informant perceived herself as a co-creator of technology, and not just a user. Another informant working in child welfare services described the possibilities resulting from this. The children they worked with needed joint activities, rather than 'only to talk'. Because there was not an option to meet with them in person, they started to use video meetings to arrange activities such as cooking or playing games while chatting. Although the informants had access to the technological artefacts, they did not necessarily have the skills to use them, let alone

adapt them to resolve the challenges and take advantage of the opportunities introduced by the pandemic.

Moreover, social workers' level of technological skills before the pandemic impacted both the scope of use and the level of creativity. Some of the informants felt unsure about how to use the virtual meeting arenas, particularly when there were several such platforms. Other informants had previous knowledge and experiences with digital technology, which they now integrated into their professional work. One informant had an interest and skills in video production. When his team of social workers could not meet the group of NEETs<sup>2</sup> in person, they were able to set up a production studio to facilitate group meetings. One example concerned rigging the studio to enable clients, through apps such as Mentimeter, to provide feedback to questions from the social workers, after which their response appeared on the wall behind the social workers facilitating the group.

The technology available, together with the informants' technological skills and professional willingness to adjust and experiment with new ways of interacting with clients, set the scene for the digital in pandemic social work. In the next sections, we will address how some practices and values embedded in social work led to the appearance of new socio-technical assemblages.

#### *Availability in times of crisis*

As mentioned earlier, the Norwegian government reacted to the pandemic by 'locking down' critical societal actors. One informant explained that she had experienced patience from her clients, and observed that they had lowered their expectations of the services due to the lockdown. She said that, '*Right now, everybody is flexible and understanding about delays and the lack of progress.*' Although she worked from home and her clients did not seem to expect rapid responses, she emphasized that, '*We keep doing things as usual, it's just that we have to do it a bit differently.*' These statements apply to all informants regardless of organizational affiliation. They were

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<sup>2</sup> NEET, an acronym for 'Not in Education, Employment, or Training', refers to a person who is unemployed and not receiving an education or vocational training.

eager to continue their work, and although they had to change some priorities and postpone some tasks, they considered their services to be more important than ever.

According to our informants, the lockdown led to concerns related to vulnerable groups in particular. They emphasized the importance of maintaining welfare services to all clients, and that no one should feel alone or overlooked. One informant put it this way:

It has been very unfortunate that some services have been completely closed. Some partners we collaborate with have put their work on hold and not realized how important they are, I think. And it has been very unsatisfactory for us, who have tried to maintain our regular activities.

In other words, the informant experienced a discomfort related to the mismatch in the way different services stayed available to their clients during lockdown. When asked about the most important thing with their work in this situation, the informants all agreed on the following:

To be present. That we still provide support. That we are still here for them. That we are just a phone call away or that we can meet for a chat. That there is someone who cares and is available. That is important.

Moreover, the informants emphasized having more frequent contact with their clients. They were worried that if clients were left to fend for themselves, they would not get the help and support they needed, especially in a more challenging period. In connection with this, one informant expressed that:

I think that having regular contact can bring along a preventive effect. So, this has been the foundation of the way I have worked in this situation. I've made it clear that I want more frequent follow ups to make it more predictable for them.

In addition, the use of technological artefacts enabled frequent contact, which contributed to a relationship building based on predictability and trust. Moreover, the social workers pointed out that availability and the quality of the relationship were related.

The social workers' organizations all had restrictions regarding meeting clients in person, but some were able to have 'ordinary' encounters if it was urgent. Permission to meet a client face to face was in most cases dependent on the severity of the case, the social workers' relationship with the clients and whether the client was at an early stage in the process. One informant stated that she would not *'cancel scheduled conversations with children, because we cannot meet them in person. We*

wouldn't allow the children to become unavailable to us'. Therefore, she sought other ways to interact with children and families, particularly with the help of technological artefacts. *'Everything now takes places at Microsoft Teams. We have not locked down child welfare services. The families still struggle, and we can't just leave them alone, especially not now'*, the informant continued. All informants, regardless of organization and target group, stressed the importance of making themselves available and underscored the role of digital technology in this process.

### *Building community through digital technology*

To have a common denominator, which in this case was the pandemic, helped to create a sense of community. Everyone suddenly had something in common, which was not necessarily present before the pandemic. According to our informants, this aspect of the pandemic made it easier to be available to their clients. To illustrate the emergence of a 'new' community during the pandemic, one informant stated:

I also feel that there is a little more personal touch in the conversations. We make contact and ask how they are doing in these strange circumstances, and they ask the same questions back. They ask how WE are, and it feels like we are in the same boat.'

Several informants use the expression *'being in the same boat'*. They had found some common ground that made them understand their clients better and vice versa. In this way, the pandemic led to social workers and clients to become more aware of what they had in common and what was different in everyday life. This awareness can help to even out the power imbalance between social workers and their clients, and lead to a stronger relationship. A key point is that digital technology was essential to accommodate this sense of community.

According to the informants, social isolation was nothing new to many clients. During a conversation with one informant, a client stated that, *'My lifestyle actually has a name. It's called quarantine.'* For this client, the changes due to the pandemic were minimal. He lived a life where social isolation was the rule rather than the exception, and now the rest of Norway's population were in the same situation. Another informant described a client's reaction to the lockdown as follows:

'Now you know how I've had it all along', she said because she hadn't been to school for many years and she had been an outsider, on the outside of many communities. And she said that: 'Now you also get some insight into how it is for me. For me, this situation is very common.'

Suddenly, the roles were turned upside down. The clients became the 'experts' in the new situation, and, as illustrated in the quote above, clients invited social workers into a community characterized by a social isolation already known to them.

The learning potential for other communities was also emphasized due to the pandemic, particularly virtual communities. A couple of informants talked about how young people invited them into their virtual communities, and how they could learn from these experiences. *'Suddenly we meet in an arena where they have knowledge and the best skills, and they have to teach us'*, one of them stated. The informants told us about their regular digital encounters with a group of young people with different challenges and that one active gamer introduced the entire group to a game. During several video meetings, they played and talked. One of the informants described how this turned the roles, because *'These kids have difficulties in so many social settings, but here [the active gamer] got to show new sides of himself for which he received recognition and acknowledgement.'* In turn, this led the informants to perceive the active gamer differently. The fact that young people are already interwoven in a digital world places demands on social workers' digital competence, thus creating an opportunity for recognition and common learning processes. One informant touched upon this, when stating that:

They are better than us at this, and they get recognition for being good. It is cool that they get to show off their skills. I don't think we would have managed this if it hadn't been for the pandemic.

Due to the pandemic, the informants found creative solutions, which involved the clients in different ways than before and set the foundation for new (virtual) communities. Ultimately, this led the informants to build relations and communities in a time with a desperate need for this. This was also a goal before the pandemic, but social distancing made the social workers rethink how digital technology could help them achieve this.

#### *Quality of virtual interaction*

The quality of the interaction was a key concern among our informants, particularly in relation to 'virtual home visits' and other forms of digital communication. While our informants had access to several secure ways of online communication with clients before the pandemic, the social distancing policies put these activities to the test.

Although it was a fast method of checking status, according to the informants written communication was perceived to be one-dimensional and led to the loss of several aspects of communication. Among other things, they emphasized the importance of body language in interacting with their clients. The informants felt like they were losing part of the social interaction when they just saw their client's face through the screen. This may indicate that the quality of the interaction declined. Other research has come to similar conclusions. Hammersley et al. (2019) studied video interaction in services, highlighting how video/audio and image-based communication provides less information than face to face communication. The social workers participating in this study were conscious of this. At the same time, despite their relatively short experiences with virtual meetings, they felt that they had managed to develop new communication skills, which to a certain degree could compensate for this shortage.

The differences in the richness of communication between the communication channels were independent of that as an issue. During the interviews, several informants hierarchically evaluated different communication channels based on the richness of their interaction. One informant expressed:

I'd rather have video meetings than telephone conversations. Telephone conversations become so short and impersonal, and are better for short professional clarifications, and things like that. To have 'good' conversations, I would rather meet on video, but most of all I prefer to meet face to face.

Another informant explained that empathy is difficult when writing, and emphasized the importance of getting real-time feedback. This was most difficult through written communication and telephone conversations, less complicated through video meetings and easiest through meeting face to face. The informants referred to face to face meetings as the 'gold standard' in interacting with clients. One advantage they highlighted with video meetings was learning to see their clients in a different way. To help illustrate this, one informant stated that:

I was surprised by the way her home looked. [...] I would have seen her differently if she just came to the office. At home, I got to see more of the context, not just the parts that needed help.

As this quote shows, the fact that social workers and clients were at home when they met shaped how the informants perceived their clients, and how they perceived themselves.

Although several informants felt somewhat alienated in the digital landscape, they still recognized the importance of adapting their approaches to what was understood by the informants as the clients' 'home ground', which in cases with children and young people, are often digital. One informant reflected on this in the following way:

It is not our home ground anymore, at least for most of us, and suddenly children and young people can experience being in control, that they are the best and that they must teach us how to navigate digitally. And then we get to see each other in new ways, they get to see us as something other than the professional social worker.

The spatial arena was central when the informants reflected on the quality of the interaction. One problematic aspect of a narrowed spatial arena in video meetings was the influence on power relations. One informant stated that: *'It is something about having social services inside your own living room. Not everyone is comfortable with this'*, and another elaborated by saying that *'One kind of takes away their private sphere, but on the other side, the family may feel more secure, because the social worker is like a guest in their own home.'*

This shows that video meetings blur the line between the private and the public, which can be experienced as both uncomfortable, but also reassuring. When social life normalizes, the informants point out that they will adapt various forms of interaction with their clients, and that the pandemic has expanded their toolbox in this regard.

## **Discussion**

The social workers participating in our study shaped technology in different ways using technological artefacts to support their methods, practices and core values. This shows that there is space for agency within the frames of the technological script. We have already shown that domestication theory is a useful theoretical framework in this regard. From here, we use the three dimensions introduced by Lie and Sørensen (1996) to structure our findings in the discussion, and take a closer look at what can be learned from the social workers with domesticating technology, as well as how digital technology supported, challenged and changed professional values in practice.

*Cognitive processes related to learning*

The pandemic led to a rapid change in priorities and work routines; therefore, the informants' rationales became more articulated. They described their rapid learning curves, in which the first step was to learn features of the digital technology available. Several informants agreed that the pandemic had led to a leap in their own digital competence. When navigating and adopting technology within the new scope of action triggered by the pandemic, our informants stated that they did not follow a recipe, and emphasized the learning aspect as they had to change their way of thinking. As one informant expressed, an obstacle for fully harnessing the advantages of digital technology and its possibilities has been *'tackling the technological roadblocks of being part of the digital immigrant generation'*. The informants also recognized the learning potential when overcoming such obstacles, and that they would not have adapted well to digital solutions if not for the pandemic. The practice of sharing their screen was something that they were particularly nervous about, as they often had sensitive personal information in other tabs. To learn in a safe way, they tried the features together with colleagues. When studying video communication as a tool for psychosocial support to people recovering from mental disorders, Oestergaard and Dinesen (2019) also found that the community of practice and mutual learning between staff and citizens were essential to the social workers. The concept of learning within domestication theory emphasizes the temporal quality as an ongoing process, which may be influenced by input from others (Ask & Sørensen, 2019). How the social workers developed their skills among themselves and their clients exemplifies this. The next step in the continuous learning process concerned the content of the virtual interaction. In this regard, creating an informal and positive atmosphere was often their primary concern.

Although many informants perceived themselves as novices in the digital arena, they all appeared highly motivated to learn how to *'tackle'* them, due to the social distancing policies. The first step to mastering this was often described as learning the different features of the programmes. The sudden and somewhat forced digital transformation due to the pandemic made our informants more aware of what went missing in virtual interactions, which they realized they greatly appreciated in their interactions with clients. It reinforced the need to meet clients face to face. These experiences created a unique setting for extensive learning. As a first step in the

learning curve, they had to move out of their comfort zones to create learning experiences. Previous research on domestication also stresses the fact that people domesticate technologies in order to achieve something (Ask & Sørensen, 2019). Our informants' sudden willingness to use virtual interaction platforms illustrates this. For them, achieving quality in interactions with clients made them desire to learn the technology needed in order to do this.

They did not see themselves merely as passive users of the digital technology. One informant enthusiastically claimed that, '*We invented [Google] Hangouts*', meaning that although they had to learn the features of different digital platforms such as Google Hangouts, they also 'invented' ways of using it to fit their needs and professional values and norms. Another example of how the social workers adjusted and fit different technology in order to achieve their goals concerned how they used apps such as Mentimeter and Kahoot in digital group meetings. This alludes to the space of agency created in their interactions with the digital technology (Berker et al., 2006). Pandemic measures contributed to what we choose to call an 'accelerated domestication process', in which the learning outcomes rapidly manifested themselves. The next step in the learning process concerned how the invention process took place within this space of agency and the practices involved, which we will discuss further in the next section.

*The construction of a set of practices related to an artefact*

The second aspect of domestication regards the construction of a set of practices related to an artefact. According to domestication theory, 'strange' and 'wild' technologies must be 'housetrained'. In this way, they are integrated into the structures, daily routines and values of users and their environments (Lie & Sørensen, 1996). For social workers, this means that the technology at hand needs to be adjusted to fit their professional goals and values. Helping clients to understand themselves and their situation, as well as strengthening their participation and sense of empowerment, are important elements in social workers' professional training. Our informants emphasized, through several examples, how these elements were taken into account when constructing practices related to video meetings.

The pandemic set the premises for virtual interactions with clients, and how social workers were free to explore and adapt the use of digital technology within a given framework. Our informants developed new discretionary practices because of the national lockdown and explored new ways of practicing digital social work, which created space for creativity. Engaging young clients through digital activities and learning from them was one example, as illustrated in the analysis. Although they highlighted creative solutions, some informants expressed a concern for the future, that austerity measures could make the digital transition permanent and limit their possibilities, thereby making virtual meetings the 'new norm' under normalized circumstances.

The invention process mentioned in the previous section consisted of developing different practices and strategies to fit the 'new normal', as exemplified in the analysis. According to Wyatt (2003), not to use specific technologies can also be a strategic decision, and when our informants reflected on what they would bring into more normalized circumstances, considerations on whether to use digital technology or meet clients in person were central. The pandemic situation and being forced into digital social interactions meant that our informants were able to put into words what they missed about the 'old ways'. They pointed out the limitations of digital technology. Among other things, they missed the close contact with clients when interacting with them face to face.

Domestication is a multi-sited and multi-agency process, in which technology itself is given agency (Sørensen, 2004). There are several overlapping efforts and purposes and manifold actors, things and people, systems and relationships that are mobilized, which come together to form and dissolve attachments (Lehtonen, 2003). As we have seen throughout the analysis, it is not just the individual social worker and the chosen digital platform that makes the socio-technical assemblage. The pandemic situation, clients, their colleagues, professional values and practices, as well as the organizational framework, are just as important. In this regard, domestication could be seen as a collective and relational process between various actors, including the technology itself. Furthermore, this allows communication, which previously primarily took place face to face, to unfold with more or other actors. Our informants clearly expressed this when they talked about how they joined their clients' living room

through the screen, and became acquainted with other aspects of their lives. This concerns how they constructed meaning related to the use of digital technology in interactions with their clients, which is further addressed in the next section.

*The construction of meaning of the artefact*

The informants made several statements that can be linked to the construction of meaning related to the artefact. In their article about video interaction guidance, Maxwell and Rees (2019) show how new technologies can strengthen traditional social work values and the return to a more relationship-based practice. The pandemic created a sudden transition and developments in practices and strategies, in which digital technology and its possibilities were integrated. One prominent change in the use of digital technology in pandemic social work was related to the possibilities to stay in touch with clients. Doing social work during the pandemic not only concerned the specific social problems related to clients' cases, but also availability in a time of crisis and rapid change. In this way, the digital technology, together with the unfamiliar situation, shaped social workers' priorities and digital technology became important in the experience of availability. The informants also pointed out that the availability and quality of the relationship were related. Similarly, Natland and colleagues (2019) state that making oneself available to clients lays the groundwork for relationship building, and invites dialogue. In this matter, the domestication process was influenced by how the informants perceived their clients' needs and perspectives.

A more unforeseen result of the virtual meetings concerned how several informants were perceiving their clients in a new light. In this regard, the materiality of the setting was highly relevant. According to the informants, their encounters with clients were perceived as more personal, in that they invited and were invited into each other's homes. In the virtual arena, clients presented more aspects of themselves and their everyday lives; for example, young clients showed and taught their digital skills through gaming. In such cases, meeting young clients on their 'home ground' helped to strengthen their sense of security and their relationship to the social worker. On the other hand, our informants also problematized that they only presented and were presented with a small section of the reality behind the screen. In many cases, they only saw their client's face, and not their bodies or other contextual aspects beyond

the reach of the screen. According to Cook and Zschomler (2020), the shift to 'virtual home visits' during lockdown had immediate and profound implications on the social workers' capacity to make sense of children's lives. In their study, social workers described gaining a greater understanding of families' everyday lives, despite the physical distance. This is recognizable in our interviews as well, but at the same time our informants also reflected on the negative aspects related to the lack of intimacy experienced during virtual home visits. This indicates that the interactive negotiations embedded in the domestication process are highly relational.

In domesticating technology in encounters with clients during the pandemic, our informants were clear on their priorities. Digital technology enabled frequent contact with clients and several opportunities to follow up, though not necessarily in line with computer safety and confidentiality. The pandemic influenced priorities regarding values. Ethical considerations of confidentiality in digital social work are considered to be one of the most important questions that social workers consider (Hill & Ferguson, 2014; Barsky, 2017), and domestication processes can be characterized by controversies (Ask & Sørensen, 2019). The most important thing for the informants was to be available to their clients so that they did not feel abandoned in a situation characterized by social distancing. Cook and Zschomler (2020) found that virtual communication with families invited a 'little and often' approach, which changed the relationship between social worker and client. Due to the pandemic, our informants realized that they shared the same challenges and problems in everyday life as many of their clients. As mentioned in the analysis, the informants felt that they were 'in the same boat' as their clients. Having frequent contact through domesticating and 'taming' technology made them feel part of a 'new' community, facing and 'tackling' the same problems.

### **Concluding remarks**

Domesticating is a multi-sited and multi-actor process of transformation that goes from seeing an artefact as radical, exciting, unfamiliar or possibly even dangerous, to seeing it as routine, mundane and an ordinary part of life (Sørensen, 2004). Rapid developments due to the pandemic and social distancing policies made it possible to investigate how the domestication processes unfolded when digital technology became an integrated and 'taken for granted' part of social work practice.

In this article, we have addressed how digital technology can support, challenge and change professional values in practice. Based on our research, we can begin to understand how social workers co-produce and adapt the use of technology to what they believe is important in interactions with clients, and in this adaptation, how they seek to preserve core values in social work practices and professional development. Moreover, we illuminate how social workers create opportunities and perceive challenges when digital technology becomes a key player.

Domestication theory pays little attention to the more structural aspects of social work (Sovacool & Hess, 2017). The organizational context of social work is controlled by bureaucratic regulations and structures, which to varying degrees limit the way technology can be used and influence the impact of technology. To further scrutinize the duality between technology and individuals, it will be necessary to include these structural characteristics and other critical perspectives in further research, in addition to the clients' perspectives on digital communication. The findings indicate that the pandemic situation expanded the social workers' digital toolbox, and that agency in digital social work needed both professional knowledge and creativity. Furthermore, the digital transformation created new forms of ethical considerations, and both risks and benefits regarding user participation. This calls for further research and exploration in the field of social work.

Norway and other Nordic countries are at the forefront of developing digital governmental services. Still, we believe that our findings contribute to international research on digital social work, a rapidly changing field. Our research shows that the pandemic has been a 'digital fast forward' for social work practice and research, and therefore accelerated the domestication of technology. We also underscore collective processes of domesticating technology within the new terms for practice, in which technological artefacts, professional social work values, social workers, clients and societal changes mutually influence each other. The domestication processes related to technological artefacts are seldom complete (Berker et al., 2006, and as virtual meetings have become a part of everyday social work, this calls for continuous research on the topic.

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