

ANDRÉ JANSSON

KARLSTAD UNIVERSITY, SWEDEN

ANDRE.JANSSON@KAU.SE

[HTTPS://ORCID.ORG/0000-0002-6121-645X](https://orcid.org/0000-0002-6121-645X)

## The Uneven Costs of Connection: Mapping Deep Mediatization Under COVID-19

**Abstract.** The COVID-19 pandemic caused what we might think of as a “natural experiment in deep mediatization” as people were more or less forced to alter their lives from one day to the other. This report presents the results from a representative Swedish survey conducted in 2021 that mapped how the COVID-19 pandemic affected people’s usage of media and digital tools. The analysis deploys factor analysis to construct five types of mediatization that took place during the pandemic and then investigates the impact of demographic factors on each type. The study shows that the costs of connection played out differently in different segments of the Swedish population. Notably, while young women were affected in a more negative way than others by digital entanglement, older people with low education suffered from a sense of alienation vis-à-vis new technology. While these types of costs represent two different forms of fractured autonomy, the analysis also shows that younger men with higher education to a greater extent maintained a sense of “elective connectivity” during the COVID-19 pandemic.

**Keywords:** mediatization, COVID-19, pandemic, report

### Introduction: Understanding mediatization under COVID-19

The title of this report alludes to Couldry’s and Mejias’ (2019) book *The Costs of Connection*, which discusses what happens to human autonomy in times of datafication and automated surveillance. Digital connectivity, they argue, runs the risk of leading to “data colonialism”, meaning that people’s social lives are absorbed into the extractive machineries of platform businesses. As we now look back on the COVID-19 pandemic that struck society in early 2020, one of the main transformations that it imposed onto people’s lives was precisely escalating digital connectivity. Spurred by technological innovations that enabled social interaction at-a-distance, this change facilitated a kind of protection from the virus while at the same time causing new

social costs. In this report, I will study these costs, as well as the new possibilities that the appropriation of new technology brought about, based on a representative survey from Sweden. The survey was conducted in February 2021, which means that people had almost a year of pandemic experiences to look back upon when answering the questions. In contrast to Couldry and Mejias (2019), my focus is not primarily on privacy and data colonialism, but rather on how people adapted their lives to the new situation and especially to the heightened demands to be digitally connected. As I will show, the costs of connection during the pandemic – for example, in terms of over-extended connectivity or techno-alienation – looked differently and was unevenly distributed across the population.

The current study can also be seen as a mapping of “deep mediatization”, referring to the current, digital extensions of mediatization processes into virtually all areas of social life (e.g., Hepp, 2019). The COVID-19 pandemic caused what we might even think of as a “natural experiment in mediatization” as people were more or less forced to radically alter their lives from one day to the other. Before we turn to the study and its results, then, it might be worthwhile to consider schematically how the pandemic played into mediatization. To do this, we can stipulate four defining features of mediatization. First, mediatization is a complex meta-process of *social change* (e.g., Krotz, 2007). This means that mediatization should not be understood merely as technological change or even as the increased penetration of new media technology, but has to do with the various, sometimes contradictory, alterations in society and culture that media are part of shaping. Second, mediatization refers to the *growing reliance* on media across *more* social realms (e.g., Couldry & Hepp, 2017). We can thus understand mediatization both “vertically” (depth) and “horizontally” (breadth), meaning for example that the mobile phone has not just become indispensable for keeping in touch with others but also (notably since the advent of the smartphone) come to saturate most parts of the lifeworld. Third, mediatization should be conceived of as a *dialectical movement* where enhanced human capacities (such as, extended social reach and capacity of orientation) come with growing *dependence* and other potential *costs* (e.g., Jansson, 2018). Fourth, and crucial to the current study, mediatization processes (involving benefits and costs) evolve through either *changes in media or changes in society*, or (most typically) combinations of both.

COVID-19 is an illuminating example of how a particular kind of societal change led to the reinforcement of mediatization – the deepening and broadening of media reliance – which was furthermore enabled by recent developments in media technology. If we look closer, we can also see that a key issue of COVID-19 was the escalating danger of physical proximity, which led to various measures to achieve and sustain “social distancing”. People should not gather too close, or with too many others, in order to prevent the spread of the virus. Accordingly, COVID-19 fostered a *disruption of social rituals* alongside a *growing awareness of the permeability of the human body* (due to the fact that all human beings are ecologically entangled parts of the natural

environment) (e.g., Ingold, 2008). As Jensen (2021) argues, social situations are elastic, ranging from the most intimate via the personal and the social to the public situation. This social elasticity, according to Jensen, can be described as a continuum between *proximity* and *connectivity*, where COVID-19 implied a general push towards intensified connectivity. In other words, during the pandemic, mediatization took the shape of *growing entanglements with media for the prevention of physical proximity and the enabling of connectivity*.

The term “connectivity” is applied here in a quite general understanding (following Jensen, 2021, pp. 70–71), referring to people’s ability to partake in social relations at a distance, which in turn makes them reliant on mediated connections. As such, connectivity could to some extent compensate for people’s lack of physical proximity during the pandemic. At the same time, it is inescapable that *digital* connectivity also sparks a plethora of automated, algorithmically governed (and most of the time unwanted) connections that entangle humans as “data-subjects” with commercial circuits of data (e.g., Van Dijck, 2013; Couldry & Mejias, 2019; Goriunova, 2019).

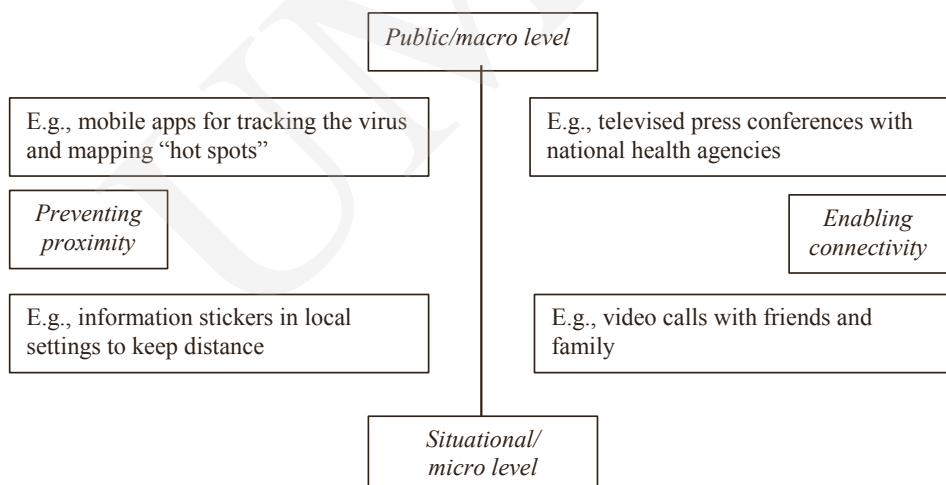


Figure 1. Four facets of mediatization during the COVID-19 pandemic  
Source: Own elaboration.

Figure 1 describes these different facets of mediatization and highlights a few examples of how different media, analogue as well as digital, entered into the textures of everyday life during the pandemic to prevent proximity and enable connectivity for those who were parted from family, friends, colleagues, and so forth. As suggested by the figure, such interventions of “pandemic media” took place on a public level as well as on the micro level, in the concrete settings of everyday life. They led to the formation of new routines and rituals and thus to a sense of security. People were

guided by signage on the floors when visiting the supermarket and gathered in front of the tv screen every afternoon to listen to the latest updates from the public health authorities. Many people communicated more frequently with their loved ones via media platforms than before the pandemic, and some tracked their whereabouts via mobile apps for the prevention of crowds in public spaces.

At the same time, as mentioned, there was a darker side of these media entanglements. Many people experienced a heightened sense of technological dependence, information fatigue or stress, ultimately a sense of lost autonomy. Since the beginning of the pandemic, there have been frequent reports about psycho-social problems related to exhaustion and depression, not least among young persons that have had to study from home. Then, if the spread of the Coronavirus reminds us about the permeability of the human body, the social problems stemming from reinforced entanglements with media testify to the permeability of our whole human existence and that we now live in a complex *media environment* with open-ended boundaries between ourselves and various infrastructures (see, e.g., Deuze, 2012; Madianou & Miller, 2013; Couldry & Mejias, 2019; Jansson, 2022). In the remainder of this report, I will address the following research question: How did different social groups in Swedish society experience and handle the dialectical force of mediatization during the COVID-19 pandemic? In a more critical vocabulary, my aim is to scrutinize which groups experienced the highest costs – and which types of costs – for dealing with connectivity during the pandemic, and which groups were able to get more positive things out of the situation.

## Methods and research context

The current report is part of the ongoing research project *Measuring Mediatization*, funded by the Swedish Ander Foundation. *Measuring Mediatization* is a longitudinal project aiming to build a time series and thereby capture *media related social change* in Sweden. Our ambition is to measure *perceived media reliance* in different realms of everyday life, as well as *in different social groups*, hence the relevance of survey data. The project conducted its first survey in 2017 and has since conducted surveys in 2019 and 2021. Each time, the questionnaire has contained a standardized set of questions to measure perceived media reliance. In addition, each survey also entails a thematic focus, such as, disconnection practices or media morality. In the 2021 survey, one of the focus areas was COVID-19 and its consequences for mediatization.

Thus, the empirical foundation of this report is an online survey targeting a representative sample of the Swedish adult population (18 years and older). The survey was carried out by the research institute Kantar-Sifo in February 2021 and includes 2401 respondents (29% answering rate). One of the questions in the questionnaire was formulated as follows: *In relation to the following statements, to what extent has*

*the COVID-19 pandemic affected your usage of media and digital tools?* The respondents were then asked to state whether they agreed or not on 17 statements. The scale included three steps; “do not agree”, “somewhat agree”, “fully agree”. These were the statements:

1. I have acquired new digital technology to the home that I otherwise wouldn't have done.
2. I have learned how to use digital tools for new purposes.
3. It has become more difficult for me to keep up with how digital tools work.
4. I have to a greater extent had to ask family/friends/acquaintances for help to make the digital technology work.
5. I have been forced to use digital services that I basically dislike.
6. My screen-time has increased.
7. I have started to use digital tools to stay in touch with friends and family.
8. I have been careful to follow the press conferences of the Public Health Agency.
9. I have subscribed to new services to be able to see films and tv series, which I otherwise wouldn't have done.
10. I have more often than before published things about my private life on social media (e.g., Facebook, Instagram, Twitter).
11. I have searched for new relationships through apps or the Internet, which I otherwise wouldn't have done.
12. I have tried to shield myself from information flows about the pandemic.
13. I have acquired new media habits that I think will remain after the pandemic.
14. I have been more connected to the Internet than I actually want.
15. I have ordered new digital services for reading or listening to books, which I otherwise wouldn't have done.
16. I have increased my news consumption.
17. I have started to use digital tools to visit foreign places.

The combination of statements is aimed to capture a variety of potential consequences pertaining to mediatization. While some statements are quite neutral, such as 1, 6 and 16, others highlight potentially positive aspects, such as 2, 13 and 17. Yet others capture negative consequences that we may also think of as “costs”. Such items are especially 3, 4, 5, 12 and 14. This is not to say that there is an objective answer as to what constitutes a “cost of connection”. However, as the 17 items are analyzed together, we can discern composite patterns that describe how mediatization processes unfolded in different groups during the COVID-19 pandemic. In relation to Figure 1, it should be noted that the questions analyzed here are mainly related to the “enabling of connectivity” side of the diagram, and just indirectly pertains to the prevention of proximity.

### Findings: Mediatization of everyday life during the COVID-19 pandemic

As a first step of the analysis, and to make the data more manageable, I used factor analysis (PCA) to identify dimensions among the 17 items in the questionnaire. As shown in Table 1, the analysis arrived at five factors (based on Varimax rotation) that represent which statements are more or less correlated with one another. It should be noted that the total explained variance comes in quite low, at 52%, which means that we must be cautious when analyzing the results. In the table, I have only included factor loadings over ,30.

Table 1. Factor analysis (PCA, Varimax rotation, Kaiser Normalization)

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Increased my screen time	,794				
More connected than I actually want	,787				
Started to use digital tools to stay in touch	,482				,344
Acquired new media habits that will remain	,447	,394			
Acquired new digital technology		,759			
Learned how to use new digital tools	,321	,577			
Started using digital tools to visit foreign places		,576			
Acquired new subscriptions for book reading/listening		,483			
Acquired new subscription services for TV and film		,482		,338	
Difficult to keep up with digital technology			,793		
Need help from family/friends for using digital tech			,753		
Forced to use digital services I dislike	,348		,539		
Posted more private things on social media				,724	
Searched for new relationships online				,706	
Tried to shield myself from pandemic news				,333	-,488
Following press conferences with Public Health Agency					,760
Increased news consumption	,372				,565
Explained variance (Total 52%)	13%	12%	10%	9%	8%

Source: Own research.

Factor 1 explains 13% of the variance and represents a mediatized condition that we may call *over-extended connectivity*. It shows how increased screen time and the appropriation of new digital tools during the pandemic was also associated with a sense of being more connected than one actually wants, and forced to use services one dislikes. This dimension provides a good illustration of the dialectical nature of mediatization processes in general.

Factor 2 represents a more positive side of mediatization. We may label it *elective connectivity* since it describes how the acquisition of new digital tools was associated with a general interest in appropriating a variety of new services, such as subscriptions on tv channels and audiobooks. The evolving media habits that this dimension actualizes are more leisure-oriented than the over-extended connectivity exposed by Factor 1. It shows people's attempts to lead a good life in spite of the pandemic,

Factor 3, again, directs us towards the costs of connection but in an inverted manner (compared to Factor 1). Factor 3 is not about over-extended connectivity but *constrained connectivity*. Here, we see how people have to struggle to cope with new technology that they have not themselves chosen to use, which may lead to a sense of lagging behind and a need to turn to friends or family members to get help to make things work. This dimension thus actualizes how the COVID-19 pandemic caused a sense of techno-alienation among certain groups and enhanced the importance of "warm experts" in their lives (see Bakardjieva, 2005; Hänninen et al., 2021).

Factor 4 describes what seems like an escapist behavior that avoids news about the pandemic while using social media to maintain a social life and making new acquaintances in spite of the restrictions. The dimension also scores rather high on acquiring new digital services for streaming media. We can characterize this type as a *digital social bubble* as it articulates the importance of new digital platforms and services to compensate for lost opportunities for socializing, that is, to make up for the social costs of the pandemic.

Factor 5, by contrast, illustrates what we may call *news (over-)dependence*. Instead of turning away from pandemic news, the dimension is characterized by increased news consumption and close attention to the regular press conferences broadcasted by the national Swedish Public Health Agency on public service radio and television. This type thus represents a behavior where people embraced the news flow, whether due to restrained life conditions and a deepened worry, or, for other reasons. We should note, however, that the explained variance in this dimension is rather low, 8%, which means that increased news consumption was a rather general change that took place among the Swedish population.

We may now consider how other factors influenced these five types. After their computation, each factor was saved as a new variable according to the regression score model (see DiStefano et al., 2009). It means that we can investigate how different background variables influence people's propensity to align their behavior with each of the five types. The overall mean for each new variable is 0 and the standard deviation is 1. A score of 1

or -1 would thus imply a very strong positive or negative effect of a certain independent variable. Even higher scores are uncommon. In this study, I have included four background variables to get a basic picture of how mediatization unfolded in different social contexts during the pandemic. These variables are *gender*, *age*, *education level* and *area of residence*.

Table 2 shows that gender has a rather strong effect on over-extended connectivity, where women feel more pressured than men to be online and sometimes use platforms and services they dislike. Gender has the opposite effect on elective connectivity but to a lower extent; it is slightly more common among men to acquire new technologies and order new services. These findings confirm previously established knowledge that women are more often negatively affected by digital stress, while men are typically more interested in, and more often responsible for, new technology in the home. Gender also plays into Factor 5, where women are slightly more concerned than men when it comes to keeping up with news about the pandemic. This finding resonates with previous research showing that women's news consumption in Sweden is more society-oriented, even cosmopolitan, than men's (Jansson & Lindell, 2015). Overall, this suggests that women paid a higher social cost than men during the COVID-19 pandemic, at least according to people's self-reported experiences.

If we take into account age, however, we can assume that it was not necessarily the same women that were pressured by being connected too much and feeling the need to follow updates about COVID-19. While over-extended connectivity was more common among the younger population, the opposite goes for news (over-)dependence. It is reasonable to assume that experiences of being online too much stem from longer periods of studying or working from home, while news dependence grew stronger among those who were in a more vulnerable age and even had to stay in quarantine. Not surprisingly, higher age also had a "positive" effect on Factor 3, constrained connectivity. Older people were the ones that most often felt that they were incapable of mastering new technology and had to ask other people for help. This finding suggests that the COVID-19 pandemic reinforced, or at least articulated, a generational divide between more and less digitally skilled people that existed before the pandemic (e.g., Givskov, 2017). At the same time, we cannot rule out the possibility that many older people took a great leap and acquired a lot of new digital skills.

If we turn to Table 3, we can analyze the impact of education and area of residence. Education has an impact especially on over-extended connectivity and constrained connectivity, but in the opposite directions. While it was people with higher education that felt that they were overly stuck in the digital during the pandemic, it was people with lower education that felt they had problems to keep up with new technology and perhaps failed to achieve the things they wanted. Again, this testifies to expected patterns, given that people with higher education are also better equipped to master new technology and oftentimes use digital platforms in their professional life or in studies. We should keep in mind that educational level correlates with age, where low education is more common in the older generation. We can also note that the

digital social bubble is typical for people with lower education, which reflects that news avoidance in general is also more common among people with low education (but in this case associated with youth rather than higher age).

Table 2. Mean values of factor score variables  
(regression scores, overall mean = 0, std deviation = 1)

	N	Factor 1 Over-extended connectivity	Factor 2 Elective connectivity	Factor 3 Constrained connectivity	Factor 4 Digital social bubble	Factor 5 News (over-) dependence
<b>Gender</b>						
Men	1182	-.206*	.064*	-.040	-.003	-.084*
Women	1219	.200*	-.062*	.039	.003	.081*
<b>Age</b>						
18-29	373	.439*	.146*	-.298*	.232*	-.262*
30-49	810	.055*	.071*	-.230*	-.033*	-.216*
50-64	683	-.072*	-.039*	.057*	-.094*	.059*
65+	535	-.300*	-.160*	.481*	.008*	.435*

Note: \* indicates significance at the 95% level. Source: Own research.

Table 3. Mean values of factor score variables  
(regression scores, overall mean = 0, std deviation = 1)

	N	Factor 1 Over-extended connectivity	Factor 2 Elective connectivity	Factor 3 Constrained connectivity	Factor 4 Digital social bubble	Factor 5 News (over-) dependence
<b>Education</b>						
Low	273	-.257*	-.187*	.540*	.208*	.108
Medium	689	-.212*	-.037*	.008*	.040*	.002
High	1439	.150*	.053*	-.106*	-.058*	-.021
<b>Area of residence</b>						
City	449	.211*	.100*	-.127*	.045	-.020
Suburb of city	357	.043*	.073*	.015*	-.013	.040
Town	756	.007*	-.010*	.013*	.038	.010
Village	476	-.169*	-.059*	.007*	-.081	.050
Countrytryside	363	-.096*	-.097*	.106*	-.017	-.102

Note: \* indicates significance at the 95% level.

Source: Own research.

Area of residence, finally, has a significant impact only on Factors 1–3. We find that experiences of over-extended connectivity were particularly common among people in urban areas, which also goes for elective connectivity. It thus seems like the force of digitalization was stronger among urban dwellers than among people in the countryside, for good and for bad. Probably, this has much to do with the type of occupations we find in urban settings (more often white-collar). In the countryside, by contrast, it was more common that people felt left behind or were constrained in their attempts to appropriate or utilize digital technologies and services. As to the latter, there may also be infrastructural differences playing into the results, even though mobile and fiber networks are comparably well-developed in most parts of Sweden.

If we summarize the significant findings and extrapolate across the independent variables (it should be noted that this is not a regression analysis and thus not shows the independent effect of each variable), we may tentatively propose five “ideal types” (following the Weberian idea of a conception that combines a number of typical features of a complex phenomenon into a simplified, or, idealized type) that represent the social structuration of mediatization during COVID-19.

1. *Over-extended connectivity*: Typically, a young woman with higher education living in the city, who is more entangled into digital systems than she wants to be, due to work or studies.
2. *Elective connectivity*: Typically, a young man with higher education living in the city, who has acquired new digital tools and streaming services in order to make life under the pandemic more bearable.
3. *Constrained connectivity*: Typically, an older person with low education living in the countryside, who depends on “warm experts” to use digital services that have become necessary while in quarantine.
4. *Digital social bubble*: A younger person with low education, who seeks intimacy and entertainment online while trying to screen off news about the pandemic.
5. *News (over-)dependence*: An older person, most likely a woman, who seeks as much information as possible about the pandemic via news and online connections to handle life in quarantine.

It should be noted here, again, that Factors 4–5 are less clear cut than the other factors in terms of explained variance and when it comes to the impact of independent variables. As I will discuss in the concluding section, Factors 1–3 also seem more fruitful to discuss from a theoretical perspective in relation to connectivity.

## Concluding discussion

In this report, I have presented findings from a Swedish survey conducted in early 2021 that demonstrate how the COVID-19 pandemic reinforced pre-existing social

differences in mediatization processes. Above all, it is evident that the costs of connection played out differently in different segments of the Swedish population. While young women were affected in a particularly negative way by digital entanglement, older people with low education suffered from a sense of alienation. As I argued in the introduction, then, the pandemic could be described as an unforeseen real-life experiment in *deep mediatization* (Hepp, 2019) that accentuated the gap between those over-entangled and those unable to master connectivity. These are two distinctly different types of costs, representing two different forms of *fractured autonomy*. But there were also groups that could manage the force of mediatization in a better way and enacted the affordances of digital media seemingly without any larger costs to handle the social restraints imposed by COVID-19. I have labeled this type, represented primarily by younger men in urban areas, elective connectivity. These social variations clearly illustrate the *dialectical* nature of mediatization process (Jansson, 2018) and how escalating pressures to be connected may lead to greater complications in some groups than in others.

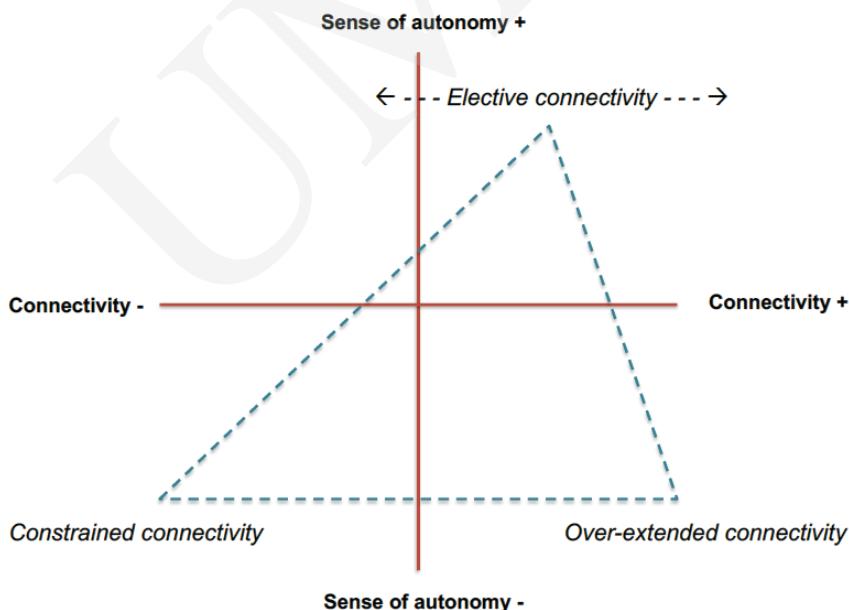


Figure 2. A schematic view of the differentiated costs of connection  
Source: Own elaboration.

Figure 2 is an attempt to schematically present the key dimensions at play when we assess the costs of connection. I argue, in line with Couldry and Mejias (2019), that a sense of lost or threatened autonomy is at the core of people's negative experiences of mediatization in general and of imposed connectivity in particular. In this regard,

Factor 2 (elective connectivity) is different from Factor 1 and Factor 3, which are low in perceived autonomy. The difference between Factor 1 and Factor 3 rather pertains to the second dimension; low versus high levels of connectivity. Factor 1 evolves as an articulation of people's failed attempts to keep their screen-time at a desirable level or to avoid certain platforms, whereas Factor 3 basically represents people's failed attempts to connect. In practice, these two types are not mutually exclusive (and none of the types discussed in this paper are) but they represent opposite types of problems that people experience in times of deep mediatization: either *too much* or *too little* connectivity. Here, elective connectivity represents a position where people at least *feel* that they can control connectivity. As I have argued elsewhere (Jansson, 2018; Fast & Jansson, 2019), this is a key aspect of social privilege in digital modernity.

The COVID-19 pandemic and its extraordinary social consequences provide a good illustration of how societal events may cause dramatic increases in people's media reliance, both when it comes to *how indispensable* media are for keeping up a decent life (depth) and for which types of activities media technologies are considered mandatory (breadth). But such dramatic events never unfold without social variations, tensions, or frictions. Hence, the current study underscores that we, as mediatization researchers, should always – also in non-pandemic times – account for the role of *social transformations* and *social structures* in mediatization processes. Only then can mediatization research reach its full potential as a *critical* and *holistic* approach that makes justice to both social and technological complexity.

## References

Bakardjieva, M. (2005). *Internet Society: The Internet in Everyday Life*. London: Sage.

Couldry, N., & Hepp, A. (2017). *The Mediated Construction of Reality*. Cambridge: Polity Press.

Couldry, N. & Mejias, U. (2019). *The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism*. New York: Stanford University Press.

Deuze, M. (2012). *Media Life*. Cambridge: Polity Press.

DiStefano, C., Zhu, M., & Mindrila, D. (2009). Understanding and using factor scores: Considerations for the applied researcher. *Practical Assessment, Research, and Evaluation*, 14(1), 20.

Fast, K. & Jansson, A. (2019). *Transmedia Work: Privilege and Precariousness in Digital Modernity*. London: Routledge.

Givskov, C. (2017). Growing old with mediatization: Reflexivity and sense of agency. *Nordicom Review*, 38(1), 53–64.

Goriunova, O. (2019). The digital subject: People as data as persons. *Theory, Culture & Society*, 36(6), 125–145.

Hepp, A. (2019). *Deep Mediatization*. London: Routledge

Hänninen, R., Taipale, S., & Luostari, R. (2021). Exploring heterogeneous ICT use among older adults: The warm experts' perspective. *New Media & Society*, 23(6), 1584–1601.

Ingold, T. (2008). Bindings against boundaries: entanglements of life in an open world. *Environment and Planning A*, 40(8), 1796–1810.

Jansson, A. (2018). *Mediatization and Mobile Lives: A Critical Approach*. London: Routledge.

Jansson, A. (2022). *Rethinking Communication Geographies: Geomedia, Digital Logistics and the Human Condition*. Chichester: Edward Elgar.

Jansson, A., & Lindell, J. (2015). News media consumption in the transmedia age: Amalgamations, orientations and geo-social structuration. *Journalism Studies*, 16(1), 79–96.

Jensen, O. B. (2021). Pandemic disruption, extended bodies, and elastic situations-Reflections on COVID-19 and Mobilities. *Mobilities*, 16(1), 66–80.

Krotz, F. (2007). The meta-process of 'mediatization' as a conceptual frame. *Global media and communication*, 3(3), 256–260.

Madianou, M., & Miller, D. (2013). Polymedia: Towards a new theory of digital media in interpersonal communication. *International journal of cultural studies*, 16(2), 169–187.

Van Dijck, J. (2013). *The Culture of Connectivity: A Critical History of Social Media*. Oxford: Oxford University Press.