

Screen time, mute, mixed messages, and panic: An international auto-ethnographic study of knowledge workers during a pandemic

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ABSTRACT

The coronavirus pandemic provoked worldwide changes to the workplace, leading to rapid changes in lifestyles and working conditions. While organizations and governments struggled to develop regulations and policies, individuals were forced to find ways to manage work and life. During the pandemic and quarantine, a group of knowledge workers from around the world convened virtually and agreed to use qualitative autoethnographic methods to study how the quarantine disrupted their conventional patterns of work and care. In this article, we apply two communication perspectives—uncertainty reduction theory and resilience—to participant diaries to understand how participants represent internal and external stressors, the efforts diarists employed to overcome those stressors, and their varying success in doing so. Post-hoc application of these communication concepts suggests that the diarists, though privileged in some ways, were not exempt from the social, professional, and emotional consequences of the pandemic and that their efforts to enact resilience were unevenly successful, especially in relation to their use of communications technology. Diarists reported struggling with uncertainty at numerous levels and that uncertainty contributed to individual emotional and cultural distress. Disruptions to work, home, and communities significantly affected wellbeing and ability to cope with challenges. Added to this were the complex and competing roles that diarists felt as they struggled to work from home, parent, and remain engaged.

Introduction

Nearly two years after the research project ended, I find that my sense of self has not yet fully returned. I am productive, for sure, but I feel less stable emotionally, less connected in my community, more fearful of things beyond my control that might affect myself and my family. (D9)

The coronavirus pandemic provoked worldwide changes to the workplace, including workers being obliged to work from home and being strongly restricted from physical contact with others. This led to rapid changes in lifestyles and working conditions. While organizations and governments struggled to develop appropriate regulations and policies, employees were forced to find ways to manage work and life. Many studies in a variety of disciplines have examined the traumatic consequences of psychological and social factors on workers (e.g., Amiri et al., 2023; Bedoya-Cardona et al. 2023; Garfin, 2020). In this study, we will contribute to this interdisciplinary dialogue by presenting the find-

ings of a communication-focused, qualitative, autoethnographic study of knowledge workers, examining their work and lives during the pandemic.

During the COVID-19 pandemic and quarantine, a group of knowledge workers from around the world, including authors of this article, convened virtually and agreed to use qualitative, autoethnographic methods to study how our experiences of the pandemic quarantine disrupted conventional patterns of work and care. Knowledge workers are characterized by De Sordi, de Azevedo, Giavina Bianchi, and Carandina (2010) as

professionals whose work is highlighted by the continuous, systematic and predominant expansion of organizational knowledge through the mechanism of exploration. This sets knowledge workers apart from other workers, who deal with already existing knowledge [information workers] and whose tasks predominantly involve the exploitation of organizational knowledge. (p. 65)

While one can argue that knowledge workers constitute a small segment of the population, they are also a population that is especially appropriate for a study on pandemic stressors and communication. Knowledge workers tend to have job security, access to technology, technology services, virtual communities, and financial and housing stability – factors that should protect them from the direst consequences of the pandemic. However, their professional roles require that they are “always on” the job, that they maintain constant connections with colleagues and students, and that they be capable of independent work and work from home.

Diary entries suggest that disruptions to work, home, and communities substantially affected our wellbeing and our capabilities to cope with additional challenges. Added to this were the complex and competing roles that we diarists felt as we struggled to work from home, parent, and remain engaged while navigating changing access to healthcare and other institutions.

In this article, we present the findings of a post-hoc, communication-focused analysis of these autoethnographic diaries to consider how knowledge workers experienced internal and external stressors, the efforts we employed to overcome those stressors, and our various successes in doing so. Findings suggest that, though privileged in some ways, we were not exempt from the social, professional, and emotional consequences of the pandemic. Our efforts to enact resilience were unevenly successful, especially in relation to our use of communications technology. These findings suggest that widespread and substantial uncertainty was a predominant factor in undermining efforts to enact resilience and point toward the need for further study of resilience failures.

Literature review

Uncertainty reduction

Michael Kramer writes in *Managing Uncertainty in Organizational Communication* (2003) that even in the best of circumstances, “individuals face uncertainties concerning the appropriate way to function in their organizational roles and maintain relationships” (p. 3). This is not necessarily because organizations are difficult or especially uncertain places, but because uncertainty exists between the self and others in almost all contexts and at a variety of different levels in an organization. Supporting this is the work of Oldeweme et al. (2010) who reference Berger and Calabrese to argue that uncertainty is “a state in which a person is confronted

with several alternatives concerning a stranger’s behavior. More alternatives make the individual feel more uncomfortable because the other person’s behavior is harder to predict” (Uncertainty Reduction section, para. 1). Oldeweme et al., Kramer, and others argue that, in response, individuals and organizations employ a variety of communicative strategies to reduce uncertainty.

Kramer details the work of other organizational communication scholars, such as Poole (1978) and Middleton (1997), who use case study and ethnographic methodologies to develop their theories of uncertainty reduction in group settings. Akin to resilience scholarship, Kramer cites Middleton’s explanation of how “discursive remembering and forgetting” provides pathways for individuals to navigate new contexts related to the employment of procedures and relationships on the bases of their past experiences (p. 37). A complementary approach from Poole describes the role information plays in individual and interpersonal group needs to reduce uncertainty:

Work groups experience different levels of uncertainty depending on the availability, uniformity and interdependence of their information needs. When information is available, uniform and independent from other groups, groups experience limited uncertainty because they have access to predictable information without having to rely on others. This would mean they have fewer information needs and less motivation to seek information. The more unavailable, unpredictable and interdependent with other groups, the more the group must develop communication network links to obtain the information they need. (p. 37)

Kramer describes some of the behaviors associated with uncertainty in an organization, such as “social unease or stiffness... long pauses, lack of interruptions, and low-intimacy topics” (p. 36). He also argues that uncertainty is exacerbated in organizations when information is lacking, outcomes are unpredictable, and the environment and who will be affected are unknown (p. 41). Kramer further argues that uncertainty contributes to a lack of satisfaction with work and that individuals seek to reduce uncertainty through formal and informal communication such as overt questioning, surveillance, observation, indirect questioning, communicating with third parties, disguising, and testing (p. 51).

Studies, such as those conducted by the American Psychological Association (APA), show that workplace uncertainty and disruptions lead to stress. The APA has been conducting an annual stress survey since 2007, but in 2020, they refocused their survey to account for COVID-19 stressors in particular. In the introduction to the *Stress in America 2020* report, they explain that their

...2020 survey is different. It reveals that Americans have been profoundly affected by the COVID-19 pandemic, and that the external factors Americans have listed in previous years as significant sources of stress remain present and problematic. These compounding stressors are having real consequences on our minds and bodies. (p. 1)

The APA reports that across all generational categories

Americans are struggling to cope with the disruptions [the pandemic] has caused. Nearly 8 in 10 adults (78%) say the coronavirus pandemic is a significant source of stress in their life. And, 2 in 3 adults (67%) say they have experienced increased stress over the course of the pandemic. (p. 2)

Pandemic stress manifested itself, according to the report, in increased tension, snapping, mood swings, and yelling (p. 2). Later in the report, the APA details the outsized role that workplace tension and uncertainty plays on working adults:

Looking at employed adults specifically, while they are just as likely to say work is a source of stress as they were in 2019 (64% of employed adults reported it as a source of stress in both years), more than half (56%) say that job stability is a source of stress, which is significantly higher than the proportion noting the same in 2019 (50%). (p. 7)

An interim APA report entitled *Stress in the Time of COVID-19* (2020) details the effects that the pandemic has had on American families, writing that “parents report stressors related to education, basic needs, access to health care services and missing out on major milestones” (p. 2). They also note that 67% of respondents identified heightened levels of stress related to the government’s response to the pandemic and that there is a six percent increase (64–70%) in American adults who cite work as a significant source of stress since the survey was administered a year before (p. 2).

Mental health effects of the coronavirus lockdowns were worldwide in scope. For example, the Organization for Economic Cooperation and Development (OECD) documented significant increases in depression or symptoms of depression in the countries they studied (OECD, 2021), and the same was found by the European Foundation for Improvement of Living and Working Conditions in the three surveys they carried out across Europe in 2020 and 2021 (Eurofound, 2021).

Returning briefly to Kramer, reducing uncertainty involves clarifying the nature of problems, identifying causes and effects, and determining who is affected (p. 39). Organizations and people within organizations reduce uncertainty through the establishment and implementation of norms, so long as they are followable, prescriptive, and contextual. This, Kramer argues, is why organizational newcomers struggle with uncertainty (p. 47) as do organizational veterans when work contexts change, such as with transfers or layoffs (pp. 52–56). Oldeweme et al. (2021) argue that “the application of URT is appropriate in times of COVID-19 since the situation is marked by various far-reaching uncertainties,” including privacy, social, and sickness (Uncertainty Reduction Theory section, para. 2).

Resilience

Patrice Buzzanell (2010) has been at the forefront of research on resilience from a communication perspective for nearly two decades. According to Buzzanell and others who have taken up this area of scholarship, stress and uncertainty are overcome at an individual level through resilience, a communication concept she defines as “the ability to ‘bounce back’ or reintegrate after difficult life experiences” (p. 1). In her presidential address for the *Journal of Communication*, Buzzanell explains that the bases for resilience “reside both in nature with individual proclivities and neurological compositions and in nurture with learning and development, social capital or networks, crisis management programs, and strategic planning and forecasting” (p. 2). Buzzanell’s scholarship describes and theorizes resilience as a complex process through which individuals productively face and come to terms with difficult circumstances and disruptions.

Buzzanell relies on the term “disruption” to describe a situation when one might need to implement resilience processes. As

a communication concept, she explains that resilience is “grounded in messages, d/Discourse, and narrative,” thus distinguishing it from the related concept in the discipline of psychology (p. 2). As a communication concept, resilience is cultivated through processes such as “(a) crafting normalcy, (b) affirming identity anchors, (c) maintaining and using communication networks, (d) putting alternative logics to work, and (e) downplaying negative feelings while foregrounding positive emotions” (p. 1). Expanding on these concepts, Buzzanell concludes that they provide pragmatic “ways of instructing people in transferrable processes or improvising context-specific message strategies” (p. 10).

In complementary works, Buzzanell and others have contextualized and expanded “resilience” to involve both conscious and unconscious processes and resilience-cultivating communication techniques people use to navigate disruptions and “tensions between continuity and change” (Wilson et al., 2021, p. 481). These conscious and unconscious communicative tools provide anchors and opportunities for people facing difficult circumstances. Wilson, et al. theorize that resilience is created through the enactment of techniques such as “(a) tact; (b) respect/harmony; (c) partnership; (d) civility; (e) tension release; and (f) restraint” (482) and that people “foreground productive action while backgrounding negative feelings” (Wilson et al., p. 481).

A communication perspective offers two important contributions. The first is to distinguish resilience as a process rather than phenomenon or a trait, and the second is to identify processes, techniques, and/or features that enhance its effectiveness. Routines, previous experiences, and reflective practice (Richardson, 2002) are all mechanisms through which humans temper the impact of future disruptions to their lives (p. 311). This “third wave” of resilience scholarship separates resilience practices from innate qualities or “a force within everyone that drives them to seek self-actualization, altruism, wisdom, and harmony” (p. 313).

Sensemaking and narrative construction are themes that run throughout the communication-oriented resilience-cultivation literature. Buzzanell explains that disruptive triggers and adaptive techniques are varied (2018, p. 14) and that “resilience cultivation incorporates stories, memories, routines, and rituals about how people not only endured despite loss and suffering but also actively shaped and framed these experiences” (p. 15). Others have picked up on this line of thinking, examining the roles that both storytelling and narrative construction have played in disruptive moments to theorize the efforts that people make in crafting normalcy. Betts et al. (2022) describe how humans approach sensemaking

through the stories they use to legitimize and rationalize action rather than in reference to some extant [*sic*], a priori system of logic. Narratives have held a dual role in the coping literature, simultaneously shaping how individuals adapt and reframing how individuals come to understand the events that necessitated adaptation. (p. 213)

They explain, “as individuals account for disruptive events, they construct anticipatory resilience as a communicatively constructed story logic, or a system of reasoning about the world, through which they understand the possibility of future normals” (i.e., states of normalcy) (p. 212).

In the sections below, application of these communication concepts will be used to explore how we knowledge worker diarists experienced uncertainty during the pandemic and our various efforts to enact resilience.

Materials and Methods

In early 2020, a group of social science researchers convened to conduct a real-time, qualitative, ethnographic study on their experiences during the pandemic. Over the next several months, 13 of us, working in university settings from 11 countries, were organized by a member of the DiGIT Digital Future of Work Research Centre. Each of us was to keep a diary from March until June, 2020. Many of us continued keeping diaries until March 2021. Diaries were intended to be shared and used in the group for scholarly projects, and collaboration was carried out through Zoom meetings and email. Synchronous, virtual meetings were held throughout the study period so diarists could produce individual scholarship related to the study, discuss and analyze findings, and plan continued study. Patterns, codes, and themes were developed through a collaborative process in which suggested discussion points and themes were circulated among diarists via email prior to meetings and were then used within meetings to share stories and findings, identify concepts, and highlight and interrogate themes. Diary responses and virtual engagements were qualitatively analyzed individually, collectively, and in small groups during and following the research period.

Diarists were located in Belgium, China, Denmark, Estonia, Germany, the United Kingdom, Norway, Slovakia, Spain, Sweden, and the USA. Author locations did not necessarily correspond with the nationality of the respondents. All but three of us were female. Most of us had young families. All households in the study were characterized by high levels of digital competency before the pandemic, having familiarity with online communication, owning many digital devices, and using those devices to work with international partners. Diarists were asked to focus our diary entries on six themes: work, children, older family members and community, their self-care, perceptions of government, and employers' reactions.

We decided collectively on identity protection for a variety of reasons. Some expressed concern about their physical wellbeing as a consequence of their national location. Others were concerned about their employment and reputations among colleagues and administrators because, as diarists, they expressed criticism of institutional and collegial behavior. Still others had concerns about the prominence of their family members in their diaries. Therefore, numbers and letters are used throughout this article in order to protect the identities of the diarists.

Our methodology can be described as “auto-ethnography” (Ngunjiri et al., 2010), involving the production and sharing of diaries and collaborative self-reflexive analysis of one's own diaries and that of others. The use of these diaries exchanged through digital media builds on the work of Studs Terkel and his classic text, *Working*, drawing on methods from the Chicago School of Sociology and more recent publications in a similar vein (Bowe et al., 2001). This develops a collaborative autoethnographic approach of critical self-reflection to understand how people's perceptions and experiences of broader significant social, political, and economic events affect their lives and those around them from a cross-national comparative perspective (Adams et al., 2014; Ellingson & Ellis, 2008; Sobande, 2018).

This article constitutes both a real-time and post-hoc, communication-focused, qualitative analysis to explicate the relationships between diary texts and the communication concepts described above (resilience and uncertainty reduction). In practice, this meant that we read through and annotated diaries and used our Zoom meetings to develop ideas about what diarists were no-

tating about their experiences. We simultaneously conducted a literature review resulting in a set of theoretical categories that were based in the literature.

We then categorized diaries, using an inductive, qualitative approach on the basis of representations of resilience and uncertainty reduction. Using a method that reflects that of LeBlanc et al. (2002), we employed conversation and questioning in our group meetings, close readings of the diaries, and multiple individual and group interactions with the other diarists and diaries to identify, produce, confirm, and exemplify theme appropriateness and salience (p. 5). Findings were reviewed, through synchronous conversation, asynchronous study, and by others in the group as a check for salience and consistency.

This research has been approved by the University of Sussex' Schools Research Ethics Committee (C-REC) ethical review process; application number ER/JO314/1.

Results

As will be demonstrated in the sections below, we struggled throughout the pandemic with both uncertainty and resilience. Uncertainty abounded, and resilience was scarce. Evidence of the effects of uncertainty and attempts to enact resilience were present throughout the diaries.

Uncertainty and uncertainty reduction

Perhaps unsurprisingly, uncertainty was a recurring thread in the diaries. From micro- to macro-level, we identified factors contributing to our feelings of uncertainty and various efforts we made to reduce uncertainty. Information problems, institutional and behavioral unpredictability, and social unease marked the uncertainty that we felt and worked to overcome.

Institutional Uncertainty

Feelings of uncertainty and uncertainty reduction efforts during this period were heavily influenced by the changing contexts of academic institutional and instructional work during the pandemic period. All of our in-person instruction was replaced with distance education. In our diaries, we described varying degrees of experience with online teaching technologies and pedagogies and concern over the time and energy needed to convert materials and pedagogies to the virtual environment. Eleven diarists mentioned experiencing stress from taking courses online. As D13 explained: “Exams, classes, everything had to suddenly move online, which was a great stress at first as we had to invent new ways of sitting exams and so on with the exam season just coming up.”¹

We wrote about our feelings of uncertainty resulting from institutional changes to learning environments and as a result of instructional and classroom behavioral norms. Our institutions were inconsistently forthcoming with information and instructions about the transition to virtual learning. Some diarists had to learn new ways of providing courses such as online quizzes, videos, assessments, and online discussion forums. Others were required to pre-record lectures to mitigate against potential future illness. Our diaries chronicled the substantial time at the beginning of the quarantine doing online training to use these

¹ Diary excerpts are copied exactly as written, including grammatical errors and inconsistencies.

technologies. As D12 reported: “Some of my colleagues never actually managed it. A certain amount of confusion with some using Teams, some using Zoom, and some using Collaborate or maybe other platforms.”

The preceding excerpts demonstrate uncertainty created around the changing contexts of our work and the efforts that we made to reduce uncertainty, such as through embracing new environments and attempting to learn new technological skills. Diary entries also show the depth and breadth of the contextual and technological shifts required during the pandemic and, as D12 illustrates, the successes and frustrations that we experienced while doing so.

While the technology posed challenges for diarists, in terms of meetings and instruction, other important factors that exacerbated uncertainty were institutional unpredictability and uneven communication. Much has been written about the pressure on institutions during this time, such as in September 2020, when *Forbes* reported that “the financial impact on American colleges and universities is now estimated to substantially exceed \$120 billion” (Nietzel, p. 1) and in the October 2020 report from the *New York Times*, entitled “Colleges Slash Budgets in the Pandemic, With ‘Nothing Off-Limits’” (Hubler, 2020, p. 1). Institutional cuts resulted in uncertainty sentiments among the diarists. D13 summarized the problem:

We are very short staffed, new appointments were cancelled, and temporary staff did not have their contracts extended, so this means a lot of extra teaching for me in addition to being responsible for two research projects.... So workloads have increased substantially.

D14 wrote:

Our university came out with some crass statements that were leaked about getting rid of temporary and fixed contract staff; that didn't go down well—even while we are all remotely working. A few days later ... they announced they would give us an extra day's holiday in recognition of all our hard work—that'll be nice—wonder what I will do with all that paid free time!!! (ironical).

The emotional and intellectual effects of these institutional concerns were expressed by D5:

Now, by start of May (2020), I really feel, I am on my knees. How would it be possible to commute or to go to conferences next to all these work duties? I really struggle to get things finished by 7pm to start cooking dinner and sometimes nap after dinner or wake up earlier to work before breakfast. I need to do laundry urgently today as I did not manage to do it over the weekend! I have been really using time intensively in my mind, but just so many activities all piled up on my desk. Every task takes time, there's no way around it.

Echoing a similar sentiment, D13 wrote:

There were a lot of mixed messages coming out from different universities we work with. Although our university had not yet officially banned international travel in the middle of March (2020), other partners we work with had. This has created a lot of problems with planning meetings that were initially conceived as face-to-face events. My employer seems to be trailing behind what the gov-

ernment does and then say they have come out with decisive decisions, which feels slightly ridiculous. It feels like they have been on the back foot or suffering from a degree of hubris. One senior manager told me that there was no COVID-19 on campus, and I just asked myself How can you make that guarantee? You are not testing anyone coming on to campus, how do you know? You don't know. The next day we had one of the first cases of a student being filmed leaving the campus to get in an ambulance wearing a hazmat suit. This caused shock waves in the local media and on campus, but in the end they were not positive. However, other students were, and they were in quarantine. So much for the confidence of our senior management team.

As these entries illustrate, institutions exacerbated uncertainty through communication problems that contributed to unpredictability. Each of the diarists reported stress related to top-down work miscommunication.

Top-down communication and institutional changes were only some of the factors contributing to uncertainty. Several diarists wrote about communication problems with colleagues during online meetings that negatively affected productivity and exacerbated hurt feelings. Institutional and scholarly labor were disrupted due to the quarantine, posing challenges to norms that created uncertainty, especially related to etiquette and productivity. Informal meetings or post-meeting discussions in the hallways were no longer possible. More than half of us wrote about challenges due to miscommunication with colleagues. D10 wrote:

Our possibilities to meet for lunches, seminars and meetings have—like for everyone else—been strongly circumscribed and the kind of small talk, so important in research and analyses, have been lost. I miss it a lot. It is of course possible to have meetings online, and that is done all the time, but there is nonetheless a loss in quality, in the widest sense of the term, of digital interactions and meetings.

We were also responsible for establishing and maintaining new norms in the new online classroom (and other) contexts over which we were supposed to preside. As D11 wrote: “I was also told that students are panicking because of this unexpected shift and it takes them time to understand new socialization rules in an online.”

While some diarists were well versed in distance and virtual pedagogies, others were unprepared for the shift. D10 wrote.

Although the majority of colleagues seem to understand the situation, I come across more and more people that seem to be very ignorant. Specifically in forums outside of their own university. People speak up and suggest that we should plan x more activities due to the extra research time we all got for free. I find this quite troubling. We have the feeling that we manage the situation quite well, but empathy seems to be tricky.

Others, however, were less prepared for virtual teaching. D9 wrote about student engagement using synchronous tools like Zoom, which were widely used in the academy during the pandemic:

I am unsure about how well my courses are going. Participation feels low—though I haven't really got much of a barometer for assessing it. I am aware that I can't see

my students when I'm sharing a screen, so I don't know how they're reacting to the material or what I'm saying. I'm also aware that many of them are choosing to not share video and almost all of them have their audio turned off. I'm struggling to understand if my sense of concern is for me or for them (likely both).

As these excerpts illustrate, we were dually pressed during the pandemic period to not just accept and operate in the new contexts, but to also create and control productive, healthy environments for our students. This second pressure was strongly represented in our diaries. Many of us had little enough experience with virtual pedagogies, and we struggled to ensure success. Classroom culture and the social unease that followed were major stressors in our newly-constructed, virtual, classroom settings.

Whether motivated by fear of action/inaction or something else, institutional inaction, unwillingness to communicate, and lack of coordination between institutions were trends that exacerbated our confusion and insecurity. Institutional changes and messaging during the pandemic period created unpredictability and social unease that were difficult for us to overcome, both tangibly and emotionally.

Government uncertainty

Governments also contributed to our professional and personal struggles through inconsistent messaging, inadequately paced and resourced activity, and decisions that seemed to contradict scientific findings—contradictions that we knowledgeable workers were acutely conscious of. We felt government uncertainty in terms of information, unpredictability, and social unease. Eleven diarists reported feeling uncertainty about government leadership, such as D10 who wrote: "From an outside perspective I feel that governments who shy away from close downs do not act very responsibly and they are on the losing side of the argument as nobody wants to be really accountable for people dying."

Late in the quarantine period, D11, after first expressing elation that the quarantine was lightening, wrote:

We started to doubt about the government's sudden decision to open everything again with no social distancing measures. What made them change their minds? Apparently, it is all based on "evidence-based" expertise (which is constantly changing at these times) claiming that young children are less receptive to the virus and are not the super-spreader they thought they were...² We decided to believe in the experts and have registered for sending our son back to school as from next week. While I think that most parents are happy to send their kids back to school, teachers and teachers' trade unions did not agree. The government did not discuss with them...

Critical voices about the end of the lockdown for schools argue that this sudden government decision is the result of political pressure from business as well as from the strong political position of the [political party]. While the Experts committee disagree with these claims, it is clear that school teachers and their representatives were not in-

cluded in the decision and that the government did not account for the fact that these workers might be at risk (my son's school teacher is approaching 60).

For D11, uncertainty resulted from what they felt were decisions that appeared inconsistent, creating the potential for social unease. For example, D11 couldn't determine whether they or their children would be safe or whether sending their children to school might put others at risk.

D9 also expressed dismay over the lack of national leadership and inconsistent decisions being made by different states in the U.S.:

There appears to be some kind of schizophrenia between the various government bodies that are exerting power over us during this time. Thankfully, my governor has been just about as cautious as I can imagine (possibly because his background is as an MD?), but given how close we are to the Tennessee border, it makes little difference if my state is safe, because Tennessee isn't. Vanderbilt University reports that cases in Tennessee have increased by 40% in the last month.

D9's diary entry exemplifies how social unease stemming from government unpredictability deeply affected our experiences and senses of uncertainty. The complexity of life in close, yet separately governed, communities resulted in a great deal of variability, meaning that our physical contexts could be changed simply by traveling short distances. We did not feel assured that those around us were similarly concerned, vigilant, or healthy.

What motivated the inconsistencies and inaction of government? While there was certainly something to be said about the lack of good data available to government decision-makers, some diarists questioned the motivation of government leaders. As D10 wrote: "I particularly hated to see that some political leaders tried to gain in the crisis by promoting that they would open up stores, etc. earlier than others. Totally unnecessary and dangerous competition." A similar sentiment was expressed by D3:

Trump seems to be more concerned about economics than US people, which is worrying. The Slovak National Bank published a forecast about expected negative impact of Corona on the economy. Obviously, quite negative, but I also felt it is too early to say anything. But at least people seem to be listening to research and analytics. So maybe after this some policy-makers might actually be interested in what we say!

And D12 wrote:

The government in the UK is a shambles, having responded too late and too little to the pandemic and being quite unprepared and chaotic. For example, they opened lots of emergency "Nightingale" hospitals with emergency beds and ventilators then had to close them again because there were not enough doctors and nurses with protective equipment to staff them.

These three excerpts highlight inconsistent approaches to governing by government leaders as well as the impact that these inconsistencies had on our senses of uncertainty and attempts to reduce uncertainty. Institutional and governmental leadership and mes-

² Ellipses denote text omitted from quotations.

saging exacerbated our sense of uncertainty throughout the pandemic period, contributing to stress. Information was lacking, outcomes were unpredictable, and the environment and how stakeholders were affected was unknowable.

Resilience

During the pandemic, we engaged in a variety of implicit and explicit strategies to overcome workplace and social disruptions, with varying degrees of success. The constantly shifting landscape of teaching online and inconsistent messaging from employers and governments made this more difficult. In this section, we will organize our efforts to overcome uncertainty and enact resilience according to Buzzanell's five resilience-cultivation processes.

Crafting normalcy

Normalcy, it turns out, was one of our most disrupted factors and, therefore, one of the most challenging processes for us to enact. Our work, families, and social lives were disrupted in ways that prevented us from feeling normal. We could not go to work, commute, shop, socialize, collaborate, or engage in other normal-feeling activities. We wrote in our diaries about negative interactions with and access to healthcare, especially mental healthcare, and how that furthered the impacts of the stressors mentioned above. D10 summed up the challenges associated with the shift to online professional engagement:

It is perhaps also a misplaced word to say that it is digital interaction, that is possible in meetings with few people, yet when the persons turn into a group, I find it difficult that these devices (like Zoom) actually replace the kind of social interaction and communication that takes place in an ordinary seminar room, or meeting situation. The outcome of scientific debate and discussion is as often the result of an almost communal process, where ideas are forged together into a broader process as well as production of knowledge. So, digital communications have been used—mainly by zoom, but my point here is that they manage it yes, but that they do not replace or substitute the conversation that forms the pillar of old academic work, and especially in major research projects.

From D10's perspective, collaboration happened, but was circumscribed. Discussions were present, but not robust.

Creating normalcy with colleagues in our new online-only meeting environments meant overcoming new structural barriers and uneven technological competence among our colleagues. D9 explained the toll of the constant back-and-forth between the physical and virtual worlds, exacerbated by the breaking of the physical boundary between home and work:

I can't seem to get to bed at a normal time or get up normally anymore. I have never been a good sleeper, but middle of the night insomnia (and stress—my brain is ON at 3:30am), it has been an every-night occurrence for me over the last several weeks. I wake up thinking about students who are struggling and to whom I owe work back, college administrators whose decisions affect me, concerns about the college and my job—you get the picture. But the weird thing is not that I want to stay up really late, it's that I can't seem to stay up late.

I'm exhausted early and some nights can't even keep my eyes open. On the other hand, when the alarm goes off in the morning, I sometimes don't even hear it. But that's not all. My daughter and I get up every weekday to do stretches and yoga. Here it is, 7:30, and she's not even up yet. I don't have the heart to wake her—because I know she's struggling too—and it's likely that we won't get it done today. We haven't had a full week of stretches since this thing began. We can't seem to do it. And I'm drinking a lot. Not excessive drinking, but a lot more regularly than I'm used to. Just about every day. The exhaustion, the monotony, it all comes with a strong sense to get a little silly for a minute.

D9 highlighted some of the challenges faced in creating normalcy: disconnection, difficulty navigating social unease, negative feelings, and being productive.

Foregrounding productive action, while backgrounding negative feelings

As was the case with crafting normalcy, our diary entries notate our struggles to find ways to foreground productivity; instead, negativity, guilt, and worry were predominant. D4 reported that they

invited my parents for a birthday family dinner at home to celebrate my dad's 75th birthday. I was in doubt whether it was the right thing to do since they by now can be considered elderly and at risk of more severe illness. However, they said they were healthy and had been taking care when going outside lately. We have also been trying to be as careful as possible. Last week we stopped taking our son when going shopping.

Doing normal things—like shopping and celebrating family birthdays—required a significant amount of additional thought during the pandemic period because of added difficulty predicting the results of interaction. New to us were concerns over deciding when and how to socialize, assessing parents' health status, and the degree of risk associated with getting together to celebrate a birthday.

The same discomfort that we expressed in the hallways of our office buildings, on the street, with extended family members, and with our children were reflected in interactions with healthcare institutions. Reflecting the APA (2020) data presented above, our diaries showed that social isolation exacerbated preexisting and other illnesses that were not COVID-19 related. D7 explained the emotional struggle needed to work:

I think it is very unhealthy and ineffective to spend so much time in front of a screen. I would do it already way too much in normal times but now it went overboard. I have become severely addicted to checking my emails and checking WhatsApp and what not.

Writing and thinking about returning to normalcy were regular, but not necessarily productive, parts of our engagement with families and others during the period. On one hand, these could be seen as attempts to foreground productivity by imagining and working towards productive engagements in the new context. For many of us, however, this resulted in precisely the opposite. We desired normal interactions like grocery shopping, eating out at restaurants, and not masking. Equally strong, however, were the

subsequent feelings of guilt and other negative emotions surrounding attempts at normalcy.

Our opinions on this were divided. Some diarists found ways to work through new structures more productively. As D13 explained:

I was in an online seminar in Paris and disagreed with one of the contributors who I have known for a long time. He later got in contact and we had a 1-2-1 discussion about his new book for over an hour and a half on a Friday afternoon. We both really enjoyed the discussion and at the end of it said ‘thank you’ and ‘you know what is really nice, neither of us have had to get on the Eurostar to talk to each other, so now we can go to our respective gardens and enjoy Friday evening with our families.

As D3 suggests, foregrounding productivity was possible for some of the diarists, especially for those with technological familiarity, enabling them to background negative feelings. However, this, like crafting normalcy, was a difficult process for diarists to enact because of the unpredictability of outcomes and the depth of risk felt that we felt.

Affirming identity anchors

Identity anchoring discourses can be found throughout the diaries. Many of us wrote about the importance of core identities, threats to core identities, and efforts we made that reflected the centrality of core identities and the importance of these anchors in such uncertain times.

Numerous examples, many in the uncertainty reduction section above, reflect our concern over how our core identities as knowledge workers were changing and how those changes shifted our senses of self. When courses were moved online, we worried about how that change would affect our identities as effective instructors. The same can be said for the shift to online-only meetings and scholarship. As D11 explained:

Contacts via emails on complex matters have made the communication more cumbersome and little issues would have been avoided faster by the coffee machine in normal times. I would say that digital interactions have cooled down empathy and reduced the occasions of ‘taking care’ of colleagues as any contact should be planned in advance. Going digital has deflated the relevance of work contacts.

D11 implies identity anchors in their comment on the changing dynamics of professional interactions by taking note of the role that collegiality and interpersonal interactions play in their capacity to conduct scholarship. Their last sentence in this excerpt implicates the struggle to chart new processes that enable them to maintain their strong sense of self.

Similarly, we made numerous references to our core identities as parents, caretakers, and community members. D3 reported:

Parents are having some hard time. Dad’s biopsy results came back, and a mild form of prostate cancer was confirmed. Doctor thinks it can stay stable on injections, no need of chemotherapy for now. I cannot imagine going through this now. I read stories of people who cannot get access to treatment they need. I really hope we persevere through this without further health complications.

Interpersonal identities were challenged when we could not fulfill our roles such as caretaking because the quarantine prevented travel and close interaction. Some, such as D3, found the distance between themselves and their parents to be a new and difficult barrier. Others found their new closeness with family members equally challenging, as parenting and partnering dynamics changed.

All of these changes are reflective of our concern over our identities and senses of self. Who are we, if we are no longer effective instructors, or if we can no longer care for our children and parents?

Maintaining and using communication networks

All of the diarists reported negative feelings associated with the conduct of online-only work meetings. Four of us wrote about their colleagues behaving differently in meetings, which also influenced productivity and collegiality. D10 wrote:

The problem is that some people dominate the meeting. Also, in case the chair isn’t poking inactive speakers for a response one might not have the chance to really have an in-depth discussion. It seems also to me that people don’t want to raise very critical issues through Zoom/Skype, even less so than in physical meetings.

This sentiment, which was also reflected by those considering changes in their roles as instructors, reflects the different communication capacities that are enabled with different media formats. D10 and their colleagues, anticipating “normal” interaction, were surprised by problems associated with the digital format, which inadequately supported collaboration, prevented in-depth engagement, and instead, fostered communicative dominance.

Many of us looked to social and traditional media for resilience and to seek out information:

We... started to call other family members that we did not use to call before. We also share more photos, videos and spend more time on social media. Yet both my partner and I have not started blogs, sharing comments, not even articles on social media. After two weeks of lockdown, he decided to reduce the time spent reading newspapers and daily updates about victims, I did not. I found it necessary to listen to how the world and in particular Belgium and Italy are going. I think I can manage the inflow of bad news, it is a way of reminding myself why we are isolating and doing all this.

As was the case with many of us, D11 used social and traditional media to connect with family and friends while locked down in quarantine. As was the case with D11, 10 diarists also reported that their use of social and traditional media was unproductive and damaging to resilience efforts. As D11 continued.

I cannot stop watching news, reading opinions published in what I hope are well informed outlets. This is frustrating because on the one hand we have many data, numbers, and graphs everywhere trying to summarize and explain reality; but on the other hand, data are not reliable and comparable. I feel I do not have enough elements to understand and evaluate what should be decided by the

government, if Italy is wrong and Belgium is right or it is the other way round.

D9 also reported

I'm obsessing over social media. I'm checking Facebook and Reddit several times an hour and the things I'm focusing on (in addition to how bungled the... government response has been and continues to be) are how wonderfully adaptive my friends seem to have been. My friends who are doing remodeling projects, who are reading with their kids. My friends who are out in the woods, learning new skills, volunteering, making masks. Where do people get the energy to do this stuff? Aren't they still working? As far as I can tell, my workday has gotten longer, not shorter, and more exhausting at the same time.

As illustrated by these diary entries, for many of us, media use—both traditional and social—was required to conduct business and needed to maintain communication networks. From within the context of our physical isolation, we used traditional and social media primarily to learn about what was going on and to extract resilience resources, but our efforts were neither productive nor affirming.

Constructing alternative logics

Buzzanell (2019) describes constructing alternative logics as a communicative system through which people enact resilience by confronting “the illogical, counterintuitive, and contradictory nature of life” (p. 74). Alternative logics were evidenced in the diaries via dark humor, on-the-fly thinking, and meaning-making. D5, who resides in a country at the forefront of the digital transition according to international comparisons (O'Reilly & Verdin, 2022), wrote:

All teaching at Uni goes online. We just get concrete messages how we have to make all changes in the curricula by Friday. Does anybody say a good word...??? At the same time, teaching needs to be online already! Now! Luckily, I don't have teaching this week, so I have some time to prepare... Our Uni e-learning environment is a disaster for online work.

Left largely on our own to make workplace decisions, diarists like D5 found themselves resentful of the lack of leadership and sharp in their critique.

Some of us began to develop our own coping strategies to make meetings more productive, but worried about how doing so might affect collegiality. D13 wrote.

Some colleagues appear to be having a lot to learn about the new etiquette in meetings. I have to confess that, when I am running a meeting, I have found the 'mute' button very helpful. In particular, it prevents some of my colleagues just 'chipping in' randomly, with not always very helpful comments. When they all have to go on mute and raise their hand to speak, it creates a much more democratic forum of contributions, depending on how well the chair manages this.

Like many of us, when D13 was confronted with a change in their workplace culture that was hurting productivity and producing

negative emotional outcomes, they took advantage of the new technological tools to undermine those who contributed to their negative feelings. But, as was the case with resilience strategies represented previously, doing so came along with a sense of guilt.

Outside of the workplace, our attempts to enact resilience through alternative logics can be observed in diary excerpts asserting agency in the face of uncertainty and confusing messages from government, schools, and via media. As D2 explained.

For a while I expected that the government should provide us with these basic protective tools. Well, we understood that it will not happen, and we need to take care of ourselves as much as we can. My mother-in-law sews [masks] for us. I could not do it. I am really terrible at sewing.

Similarly, D7 wrote about feeling like they needed to protect their children beyond what was being offered by in school:

[In my country] schools have not closed down. However, my partner and I have decided to keep our children home for the first seven weeks because we disagreed and felt very insecure with the policy, particularly their sheer neglect of some pieces of scientific evidence, such as the fact that it seems that also asymptomatic people spread the virus.

In both of these instances, diarists expressed dark humor about the new normal while also providing insight into what they were actively doing to maintain their sense of safety, especially as contexts shifted.

Discussion

As the opening quote for this article illustrates, the mental and physical consequences that the knowledge worker diarists in this study felt were substantial and ongoing. What can account for our struggles? Why were we, with access to technology and relative stability, unable to overcome uncertainty and enact resilience? The evidence presented above suggests that we attempted to overcome uncertainty and enact resilience: We crafted normalcy for ourselves and others, were conscious of identity anchors, used communication networks, creatively applied alternative logics, and attempted to downplay negative feelings.

Readers might be quick to dismiss knowledge workers, such as those described in this chapter, as Ross Douthat (2021) did in a *New York Times* editorial, in which he used the term “laptop class” to describe the advantages of people like us during the pandemic quarantine (p. 7). As knowledge workers, we had some distinct advantages over others, such as job security, access to technology, technology services, virtual communities, and financial and housing stability. According to Douthat and others, we should have been able to weather the pandemic with lower negative impact than others. Financial and career stability, existing familiarity with social and communications technology, and professional roles, enabling us access to information and other resources, should have helped us enact resilience and overcome uncertainty. However, these findings suggest that our “laptop class” privilege, when it came to emotional and social wellbeing, was not an alleviating factor.

Due to the small sample size and qualitative ethnographic methodology, the findings represented in this article cannot be

universalized. But while the methods and particularity of the population are a limitation, these findings about our struggles with uncertainty reduction and enacting resilience point to the need for further research on uncertainty reduction and resilience theories. Just as importantly, they demonstrate the magnitude of the health-related consequences of the pandemic in a population that provide crucial educational and knowledge-creating services to the global population.

First, the breadth and depth of uncertainty during this period were dramatic and constantly changing. Both uncertainty reduction and resilience theories are based on the premise of “disruption” and overcoming disruption, but the diary excerpts highlighted in this study demonstrate that we experienced disruptions—multiple, compounding, identity-shaking, and uncontrollable disturbance to our professional, personal, civic, and social lives. We were already juggling many roles: instructor, colleague, researcher, partner, parent, friend, community member, etc. Layered on top of these were perceptual changes to time and space resulting from the quarantine. Diary entries expressed our stress related to the demands of competing roles such as parents whose work required them to engage in professional activities while their children required their attention and researchers who were learning new methods to collaborate. The compounding effects of this multiplicity took a substantial toll. We could not turn to one identity or another to feel resilient because of how many personal and professional identities were in crisis.

Second, and perhaps more directly related to the particularities of this study population, as knowledge workers, whose workplace output was not just information, but education, we were uniquely aware of our impacts on others. This factor appears to have also been significant in preventing us from overcoming uncertainty and enacting resilience. We could not allow ourselves to focus solely on keeping ourselves safe at work because of our obligation to care for our students. We wrote in our diaries that we felt run down, exhausted, overworked, and overwhelmed. We were exhausted by the energy needed to protect ourselves and our families, not knowing the effectiveness of safety protocols, the ever-shifting statements from government and academic institutions about what to do and how to do it, and the frustration of living and working in communities without standardized behavioral norms.

Added to these were the complicated consequences of our mainstream and social media use. Unable to connect physically with people and predisposed to use communications technology, most of us turned to media to stay informed and create community. However, the resilience that was supposed to be enacted through information gathering and virtual engagement backfired in many instances. We could not blithely interact in person with others in our communities because we knew the dangers of doing so. Our status as information producers and consumers, our high degree of media literacy, and our habitual use of traditional and social media only served to sharpen our awareness of our potential impact on others, exacerbating fear and guilt. Engagements with mainstream media produced a depressive effect as we learned about government and community inaction, misinformation, disinformation, anti-science activism, COVID denialism, and the like. Social media often made us feel isolated in our communities, afraid of our neighbors, separated from our families, and dismayed by governmental and other decision makers.

In short, the findings represented in this chapter demonstrate that despite our best efforts to at least implicitly reduce uncertainty and enact resilience, we knowledge worker diarists struggled with both. This can be attributed in some ways to the essence of knowl-

edge work: A consequence of our work, lives, and personal attributes may be that we were predisposed to this type of struggle. But a more salient conclusion might be the significance of compounding uncertainties and perceptual frustrations that resulted from our resilience failures. These findings seem to represent trends that can be studied in larger, more diverse populations and suggest the need for further research in both areas of scholarship.

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