

**Implications for hybrid newswork from the work-from-home activities of local US television journalists during COVID<sup>1</sup>**

Kevin Crowston \*

Syracuse University School of Information Studies  
ORCID ID: 0000-0003-1996-3600

Keren Henderson

Syracuse University Newhouse School of Public Communications  
ORCID ID: 0000-0002-4770-5038

Kian Loong Lua

Syracuse University School of Information Studies  
ORCID ID: 0009-0007-1265-2515

Raghav Raheja

Syracuse University School of Information Studies & Social Lens

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\* **Corresponding author:** Hinds Hall 230, Syracuse, NY 13244 USA, [crowston@syr.edu](mailto:crowston@syr.edu)

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## **Implications for hybrid newswork from the work-from-home activities of local US television journalists during COVID**

### **Abstract**

In response to the COVID-19 crisis, many local television (TV) newsrooms decided to have employees work from home (WFH) or from the field rather than from the newsroom, creating a kind of hybrid work characterized by a mix of work locations. From a review of research on telework and WFH, we identified possible impacts of WFH on work and on workers, with a particular focus on news work and news workers. Data on the impacts of hybrid work are drawn from interviews with local television news directors and journalists in the United States and observations of WFH. We found that through the creative application of technology, WFH news workers could successfully create a newscast, albeit with some concerns about story quality. However, WFH did not seem to satisfy workers' needs for socialization or learning individually or as a group and created some problems coordinating work. Lifted restrictions on gatherings have mitigated some of the experienced problems, but we expect to see continued challenges to news workers' informal learning in hybrid work settings. (175 words)

Keywords: Work from home, hybrid work, social and professional isolation, informal learning, work-life balance, coordination

## **Implications for hybrid newswork from the work-from-home activities of local US television journalists during COVID**

This paper reports on a qualitative exploratory field study of the implementation of work-from-home (WFH) for television (TV) journalists in the United States (US). In response to the public health crisis caused by COVID, many (though not all) US local television newsrooms required staff (i.e., reporters, photographers, producers and sometimes managers) to work only from home or from the field rather than from the newsroom to reduce viral exposure and increase employee safety, as happened in many other countries (Araújo et al., 2024; Casero-Ripollés, 2021; Finneman & Thomas, 2022; García-Avilés et al., 2022; Santos & Mare, 2021; Trifonova Price & Antonova, 2022). This move created a kind of hybrid work characterized by workers in a mix of work locations. Our study is based on interviews with twelve local US TV news directors and observations of eight news workers in one station. We seek to understand the effects that WFH had on work and workers and how workers adapted to this hybrid mode of working.

Newswork has several characteristics that make it particularly challenging even in traditional circumstances and that were expected to pose increased challenges for WFH. Chief among these features is that many journalists traditionally work on strict deadlines. Web publishing can be more flexible, but it does not remove the time-sensitive nature of the work, which has famously shifted to a 24-hour rolling deadline (Molyneux, 2018) with pressure for constant availability (Lukan & Čehovin Zajc, 2022). News work is stressful also because the news being covered can be personally harrowing (e.g., fires, crashes and shootings in normal times; COVID deaths and restrictions during the pandemic) and because of the personal toll of attacks on the credibility of news organizations and news workers.

Economic factors are also important in understanding how news work is done. Dwindling staff in newsrooms of all types is not directly the effect of the substitution of labor. Most US journalists

work for for-profit companies, leading to long-standing and ongoing tensions between journalistic values and business interests (Finneman & Thomas, 2022; Hardt, 1996). In recent years, ownership of US newspapers and TV stations has become increasingly concentrated. Though local TV has not (yet) seen the aggressive redistribution of advertising revenue afflicting print and online news, it nevertheless faces a greater focus on the cost of operations at the expense of journalistic values. The impact is documented in research showing a drop in public-affairs stories in local TV news in favor of fires, crashes and shootings (Slattery et al., 2001) in opposition to journalists' professional desire to cover stories people need to know. Changes in employment relations has left many kinds of journalism increasingly precarious and fragmented (Deuze & Witschge, 2018). These strains were exacerbated during COVID (Finneman et al., 2023).

Finally, another important factor is that journalists typically learn a lot on the job from managers and co-workers, through explicit mentoring, informal interaction and legitimate peripheral participation (Cushion, 2007; Guo & Wang, 2022). A graduate from journalism school or other new hires may not be skilled in every task to be performed or tool to be used when they start their job, especially as new tasks emerge alongside technological innovations. However, a consequence of the constant deadline pressure is a lack of time to devote to learning new technologies and new ways of working beyond what is strictly necessary.

Our findings suggest that despite these challenges, news workers were able to be successful (at least in the short term) under the conditions of WFH and that information technology played an important role in their responses. Under pressure to adapt, we observed some news stations undergoing a hastened digital transformation of how they worked, developing creative uses of information technologies. However, we also observed impacts on worker well-being and effectiveness from social isolation and issues with enculturation and learning. Despite these

challenges, interviewees suggested that WFH may be the “new normal” as at least some workers and many managers expect to retain some aspects of WFH even in the absence of COVID restrictions. Deuze & Witschge (2018) referred to the move of newswork out of newsrooms to a network of individual actors as “beyond journalism”. Learnings from this study are thus informative for the future of journalistic hybrid work and hybrid work more generally.

## **Literature Review**

We start by reviewing two bodies of prior research that inform our study: studies of the impacts of COVID on journalism and studies of telework as an instance of hybrid work.

### *Impacts of COVID on News Work and News Workers*

First, there has been recent research on the impacts of COVID-driven restrictions on work and workers, and on news work and journalists more specifically. Many studies have noted the stress put on journalists leading to feelings of exhaustion, fatigue and lack of motivation (Arcalas et al., 2022; Backholm & Idås, 2022). This stress was exacerbated by the specific characteristics of news work, such as personal risks from reporting from the front lines of COVID treatments (Casero-Ripollés, 2021; Finneman & Thomas, 2022), reduced access to sources leading to over-reliance on a few (Santos & Mare, 2021; Tandoc et al., 2022; Velloso, 2022), lost capacity to report already marginalized voices (Santos & Mare, 2021) and challenges to reporting when political actors asserted control of information, for example, by limiting data releases or opportunities to question officials (Casero-Ripollés, 2021; Tandoc et al., 2022; Trifonova Price & Antonova, 2022). Interestingly, the stress heightened journalists’ awareness of the importance of their role in informing the public and countering the growing spread of misinformation (Araújo et al., 2024; Casero-Ripollés, 2021; García-Avilés et al., 2022), which even increased job satisfaction (Libert et al., 2022).

Research has described adaptations of newswork practices to address the need for social distancing. For instance, Okopnyi et al. (2023) noted that because fewer workers could be present in a newsroom or at an interview, tasks shifted to those remaining, for example, reporters or even interview subjects themselves learning to shoot video because photographers were not available. They suggest that as a result, journalists have to become less specialized. Journalists also reported an increased focus on data-based stories to compensate for the lack of access to sources (Velloso, 2022) or to explain the pandemic, for example, using infographics (García-Avilés et al., 2022; Santos & Mare, 2021).

Other work has documented the role of technology in the response to COVID restrictions. Subires-Mancera (2023) identified the critical importance of the improved technical capability to capture audio and video on consumer devices, such as smartphones or webcams, and of Internet-based video conferencing for interviews and to connect journalists in the field to a broadcast. She also noted a growing willingness of journalists and the viewing public to accept lower-quality video as a tradeoff for access. Other researchers noted the increased use of communication technologies to connect and coordinate workers who could no longer be co-present and the need to develop protocols for using these connections (García-Avilés et al., 2022; Hendrickx & Picone, 2022; Okopnyi et al., 2023). With these tools, there are even reports of increased contact and coordination with superiors (Tandoc et al., 2022). A limitation though is that there is little or no contact with colleagues with whom there is no need for regular coordination (García-Avilés et al., 2022). Finally, one study reported increased use of automation to reduce the number of people who need to be present at work, though noting that reducing cost is also a strong driver for automation (Okopnyi et al., 2023).

While these studies provide a broad overview of journalists' adaptations to COVID in diverse settings, only a few explicitly address the impact of hybrid work situations for work and workers. There is even less explicit attention to what those experiences mean for the future of hybrid work—the focus of this paper—even from those authors who predict that this form of work will remain common (e.g., García-Avilés et al., 2022). Finally, most studies have focused on print journalists, primarily outside the US, a different medium and institutional context than our study.

### *Hybrid Working by Telecommuting*

We next review research on the impacts of working out of the office, drawing from research on the impacts of telework or telecommuting, as WFH mandated in the time of COVID is similar to the way teleworking has long been performed. By telework, we mean situations where an individual worker performs their regular duties from an alternative workplace, for example, home or perhaps a telework center, in collaboration with those in the main workplace, thus creating a hybrid workforce, some present and some remote. For instance, many stations have long had reporters in remote bureaus or working independently. We also include articles that examine WFH during COVID specifically, which differed from prior hybrid work in the sudden far-reaching shift of workers to this mode of working.

Of particular interest is the role of information technology in supporting telework. A teleworker often works via technology, for example, to connect to the employer's network and systems, and to maintain contact with the community, that is, their manager or fellow workers, via electronic media such as email, chat or video conference (Belanger et al., 2001). We conceptualize technology as an assemblage, that is, a collection of different systems, each individually selected and appropriated to address some particular task (Sawyer et al., 2014). For instance, journalists typically use different applications for word processing, email, calendaring, recording interviews,

tracking sources and editing video. Some of these technologies are personally selected, while the employing organization dictates many others. As a result, different journalists may use slightly or radically different assemblages while doing the same kind of work. And as technologies change, the assemblage will also change, steadily evolving—for example, email replacing fax, and cell phones replacing landlines (Reich, 2013)—or in rapid jumps, as with the rise of data journalism and the addition of big-data tools or the addition of teleconferencing apps during WFH. An important consideration for adoption is whether the technology is useful individually or if it is intended to support a group, meaning that all members must agree to adopt it for it to be useful.

To organize our review of the impacts of telework on worker effectiveness, we apply Hackman's (1987) team effectiveness model, which identifies three objectives to consider in assessing the effectiveness of a team: task output, team member growth and fulfillment and team viability.

- Task output: client satisfaction, or the degree to which the group's product or service meets the standards of quality, quantity, and timeliness of the people who receive its output.
- Team member growth and fulfillment: satisfaction of an individual team member's personal needs, or the degree to which the team experience contributes to the growth and personal well-being of team members, which might include team member future employment opportunities, reputation and learning.
- Team viability: the continued ability to work together or the degree to which the process of carrying out the work enhances the capability of group members to work together in the future.

We note that while Hackman focused on the effectiveness of teams specifically, the first two dimensions of effectiveness apply equally to individual work.

**Task output.** We first consider task output (also called production), meaning the degree to which the teleworkers' product or service meets the standards of quality, quantity, and timeliness of the people who receive their output. Interestingly, our review of the literature on telework did not turn up many discussions of telework creating problems producing satisfactory task outputs, perhaps because problems with production are a reason to stop teleworking. Indeed, teleworking has even been found to be beneficial for production by limiting interruptions from coworkers and supervisors, letting the worker focus on actual work (Bloom et al., 2015), a finding echoed during journalists' WFH (García-Avilés et al., 2022). Not having to commute also potentially increases the time available for work. However, literature has noted limits on the kind of work that can be undertaken in this mode. For instance, reduced opportunities to interact face-to-face could hamper the development of an intra-organizational network and thus the ability to work on interdependent tasks (Allen et al., 2015). Companies may have a free-flowing culture with *ad-hoc* huddles to discuss the problem at hand, which would leave out a telecommuter (Kurland & Cooper, 2002).

Conversely, a major concern for the managers of teleworkers is the loss of control and the perceived inability to measure performance (Kurland & Cooper, 2002). The literature has identified different performance measurement tools, for example, to capture screen time, keystrokes or emails. However, the surveillance of these tools often reduces the motivation of the telecommuter and leads to more pressure, thus negatively affecting performance (Fairweather, 1999). An alternative form of measurement is a performance-based approach such as Management by Objectives (MBO), where performance is evaluated by the final task output. However, reliance on this form of performance measurement may lead to a feeling of loss of control for the manager (Kurland & Cooper, 2002). More general research on the impacts of COVID-related lockdowns has noted the difficulties that managers in particular perceived in coordinating work of or

providing leadership to remote workers (Birkinshaw et al., 2021; Kirchner et al., 2021; Teodorovicz et al., 2022). A particular difficulty was bringing on new remote team members (Birkinshaw et al., 2021).

**Team member growth and fulfillment.** Turning to contributions to the growth and personal well-being of workers, the most commonly discussed impact of telecommuting has been the isolation of working from home, either professional or social (Allen et al., 2015). Professional isolation means that teleworkers feel that they are “out of sight, out of mind” in terms of work (e.g., not being included in informal discussions). A common concern about professional isolation is being overlooked by the manager in terms of getting work opportunities and career progression (Kurland & Cooper, 2002; Yap & Tng, 1990). For instance, a manager might entrust a project to an employee because they met and discussed it informally (Kurland & Cooper, 2002), which might not happen to a teleworker. Social isolation means that workers feel personally disconnected from the community of their coworkers and their supervisor. A survey of Belgian journalists during COVID found many reported social isolation (Libert et al., 2022), a feeling repeated in many other settings (e.g., Gao & Sai, 2020). It has been found that the type of job can moderate feelings of isolation. Jobs that require face-to-face interaction (e.g., through video conferencing) make workers feel less isolated in comparison to jobs that require minimal or no face-to-face interaction (Golden et al., 2008).

A second impact of telework is on continued learning by the teleworker. Learning often flows in the network through connection and communication with coworkers and supervisors (Allen et al., 2015). In a scenario where the employee has limited opportunity to interact with others informally, there are negative impacts on professional development. Moreover, learning does not just happen through one medium: the lack of physical presence reduces one’s ability to learn

through informal interaction with coworkers. The ability to reach out to the coworker on the next desk is hampered when teleworking (Mathisen, 2019). Conversely, managers often feel that it is difficult to mentor remote employees (Kurland & Cooper, 2002).

Third, telework can create issues for work-life balance. Telework is often looked at positively by employees as it can increase options to manage work life (Allen et al., 2015; Gajendran & Harrison, 2007) and so the ability to more flexibly balance family and work (Delanoije et al., 2019). Specifically, it has been found to increase opportunities for women who traditionally have faced greater household responsibilities (Iskan & Naktiyok, 2005). The literature has found that telecommuting moderately improves family relationships and reduces family conflicts (Allen et al., 2015; Gajendran & Harrison, 2007). A possible outcome of the broad shift to WFH is an increased acceptance of the blurring of family into work times and spaces (Couch et al., 2021). However, the flexibility that comes with telework can also cause frustration because of the difficulties in dividing time between work and family (Couch et al., 2021; Libert et al., 2022; Mann & Holdsworth, 2003) and an inability to know when to stop working (Allen et al., 2015; Mann & Holdsworth, 2003). It seems like a paradox, where on one side teleworkers feel less stressed working from home in comparison to working from the office because of their ability to have more control yet at the same time, find it difficult to move from one task to another (Duxbury et al., 1992). It is like saying: “I have control, but I can’t stop working.”

**Team viability.** A final impact of telework is on the capability of group members to continue working together on an ongoing basis. Information and resources often flow through relationships, so teleworkers who have minimal chance to interact informally with others reduce their chance to form strong relationships (Kurland & Cooper, 2002). Research has noted that face-to-face interaction is important in creating a sense of trust, which leads to stronger mutual understanding,

leading to better coordination and flow of ideas (Kurland & Cooper, 2002). These developments can be hampered in a hybrid team. A limited ability to contribute and interact with other members around projects can also lead to reduced knowledge sharing and spontaneous coordination (Hendrickx & Picone, 2022; Waizenegger et al., 2020). Similarly, managers report feeling that telecommuting leads to a loss of team synergy and intra-organizational interpersonal networks (Kurland & Cooper, 2002). A key factor affecting the need for coordination is the level of dependencies among the group member tasks. Malone and Crowston (1994) note that dependencies require additional work to manage, what they termed coordination mechanisms. Thompson (1967) proposed three levels of dependencies, pooled, sequential and reciprocal, increasing in intensity and the need for coordination. On the other hand, technology has affordances that can support team collaboration, for example, daily Zoom check-in meetings that help signal the start of the workday and provide some sense of connection to others (Waizenegger et al., 2020).

In summary, the literature on telework suggests that teleworking employees can be productive, at least for some kinds of work, but may suffer from difficulties with work-life balance, loss of informal learning and isolation, leading to reduced connections to co-workers and problems coordinating work. Better technology may help mitigate these issues.

**Differences between telecommuting and WFH during COVID.** While the telework literature is quite informative about the possible impacts of WFH, it is important to note several differences between traditional telework settings and the WFH situation facing journalists that affected how WFH was experienced (Waizenegger et al., 2020).

First, traditionally teleworkers are chosen as eligible for teleworking based on having the necessary individual personal attributes to do it successfully (Kurland & Cooper, 2002). For

instance, discipline is often listed as an attribute that decides the success of a teleworker (Allen et al., 2015; Baruch, 2000; Fairweather, 1999). Being a self-starter and organized would also enable a teleworker to better manage their work and the work-life boundary (Fairweather, 1999; Yap & Tng, 1990). As well, satisfaction and the effectiveness of telecommuting depend on the appropriateness of the type of job for telework, which is another selection criterion. But with WFH, there was little or no selection: the situation demanded that nearly all workers work from home if they could. Looking forward, the enforced nature of WFH is not expected to continue, but the broadened ability to WFH might mean that more people experience this kind of flexibility than would be included in a traditional telework program. Indeed, research suggests that many of those who were forced into WFH by the pandemic found that they benefited, suggesting that they will want to maintain it in the future (Bick et al., 2020).

Second, in a traditional telework setting, employees are trained in successful techniques of teleworking before they start (Allen et al., 2015; Kurland & Cooper, 2002) and are provided with the necessary resources. For instance, the literature mentions that individuals who have an in-home workspace for telework performed better than individuals who were less well-equipped (Yap & Tng, 1990). However, the exigencies of COVID often meant that workers were forced into this mode of working with little preparation either personally or in terms of resources to support work or even a space to work in. For instance, Hoak (2021) found that nearly one-quarter of WFH journalists reported “receiving no supplies, technology, or extra training at all”, leading to greater levels of stress. Stress from WFH was reported to be higher among those without prior experience (Escudero-Castillo et al., 2021; Oksanen et al., 2021). Looking forward, one might expect that several years’ experience with WFH will have substituted for formal training and those still lacking resources will cease WFH.

Finally, the literature suggests that telework results in improved performance if it is done in moderation (Baruch, 2000; Gajendran & Harrison, 2007; Golden, 2012). Research has distinguished between high-intensity and low-intensity telework. High-intensity telework means that work is often performed from home, similar to full-time, while low-intensity telework means that a part of the work is done from the office and part from home. Moderate intensity of telework has positive implications on the performance, motivation and family relations of the individuals (Allen et al., 2015; Gajendran & Harrison, 2007), while high-intensity telework has been shown to negatively impact these outcomes. Unfortunately, with COVID-driven WFH, it was usually not possible to select the option of WFH only a few days a week. As well, WFH may have gone hand-in-hand with other restrictions on life, for example, a lockdown, exacerbating negative impacts such as social isolation. In contrast, a future hybrid work environment might look more like traditional telework than COVID-era WFH.

On the positive side, it is important to note that the technology to support telework has improved greatly since the time of many of the studies cited above. Personal computing and networking are much more capable and fully integrated into many kinds of work, which may offset some of the negatives (Kuruzovich et al., 2021).

### *Research Questions*

From the review, we developed three broad research questions that guided our data collection and analysis. First, past research has noted that the type of work affects telework success. News workers have varied kinds of jobs with different demands for interaction, from in-field story collection to in-office reporting and production. Therefore, we first asked, what the consequences of hybrid work locations during WFH are for people in different roles with regard to getting their work done (e.g., producing a news story or managing subordinates)? Second, given prior studies

noting the importance of information technology for telework, we asked what technologies are being used to facilitate hybrid working and how they are being applied? Finally, given the diverse effects noted in the literature, we wanted to understand the consequences for workers facing hybrid work locations, such as impacts on productivity, learning, isolation or work-life balance. We also consider the effects of hybrid work on work relationships at the team level, as telework has been shown to decrease team cohesion and to complicate coordination.

## **Materials and Methods**

### *Setting*

Our project is set in the context of local television news production. As background, we provide a description of the regular work of news workers, focusing on the core group of reporters, photographers, producers and news directors. Anchors, the digital team (i.e., journalists who adapt or create content for the web or social media), editors and weather or sports reporters were not the focus of the study.

**Reporters and photographers.** The reporter is responsible for developing a story to be part of a TV newscast. While some stories may be developed over days or even weeks, most are completed in a single day. An initial action is to pitch a story idea to the news director during a daily meeting and get approval to develop it. The reporter identifies information sources for the story, arranges interviews and asks questions during an interview, typically conducted face-to-face. In partnership with reporters, photographers record video of the interview and what is called the B-roll, additional video to support the story, for example, footage of someone doing the activity that is being described. It is common in smaller markets to have one person, a reporter-photographer or multimedia journalist (MMJ), do both jobs (Papper & Henderson, 2023).

Reporters write the script for what they will say during the story and what material to use from interviewees, working with the photographer to match the recorded video to what the reporter wants to say or adapting the script to fit the available video. The reporter might develop different versions of the story for different newscasts or the story may continue to develop and be updated.

The photographer and reporter (or sometimes an editor) edit the recorded video to match the script and add any needed voice-overs, using an editing program such as Adobe Premiere, Avid or Final Cut. For this purpose, a station will usually have several editing stations, computers with editing software, as well as recording booths for recording voice-overs. Finished stories in the form of large high-resolution video files are stored on a server to be available for broadcast.

Reporters often appear live on camera during the broadcast to introduce their stories or record an introduction instead (a “look live”). If the reporter is in the field, the live video can be transmitted to the station in several ways, for example, by satellite, a dedicated microwave transmitter or increasingly via multiple cell phone connections used simultaneously to increase bandwidth, for example, LiveU or Dejero.

**Producers.** Producers are responsible for the entire TV newscast. Producers decide which stories to include in their shows, in what order and with which presentation techniques. Producers write scripts for the anchors to read during the broadcast. In many newsrooms, for stories not already covered by reporters and their photographer partners, producers are also the video editors and the graphic designers for the newscast content. The producer’s daily work culminates in the actual live broadcast, during which the producer coordinates directors, sound engineers, graphics editors, video feeds, camera operators, anchors, reporters, news wires and more to broadcast the day’s stories to the audience (known as “boothing” the show, done from the “control room”).

**Managers.** Traditionally, the role of the local TV newsroom manager (the news director) includes editorial decision-making, hiring and firing responsibilities and budgetary distribution in terms of money, staffing, and time. Today, that role has expanded to include multiplatform editorial decisions across TV, web, social media and streaming channels, related marketing responsibilities and many new human-resource obligations (Dworznik, 2018). Of particular significance to this study, an important managerial responsibility in many newsrooms is overseeing the work of less experienced staff and providing feedback, mentoring and on-the-job training.

### *Data Elicitation*

Our study draws on two sources of data. The first source is semi-structured qualitative interviews with a purposive sample of twelve newsroom managers from local TV stations across the United States (US). News directors were chosen for the interviews because they could provide a broad perspective on the work and because they were responsible for devising and implementing policies to respond to COVID. Seven of the news directors work in large-market stations and the other five in medium-market stations, defined as stations located in the Top 30 (large) and 31-100 (medium) 2021 Nielsen-ranked markets<sup>2</sup>. See Table 1 for a list of the interviewees. Subjects were solicited from respondents to a prior study. All interviews were conducted via Zoom in January 2021 and lasted between 25 and 42 minutes with an average length of 34.5 minutes. The investigator who led the data collection is a former local-television-news producer coming to this study with years of newsroom experience, shared professional language and workplace cultural understanding.

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<sup>2</sup> The Nielsen Company divides the US into 210 Designated Market Areas (DMAs), regions in which viewers receive more-or-less the same TV content and that constitute a single market for advertising sales. DMAs are ranked by the size of the audience, from New York (1) to Glendive, Montana (210).

News directors were asked questions about their experience managing their newsroom during the COVID pandemic. They were asked: what they felt was lost or gained during this arrangement of WFH, what they learned from this experience, if they believed that WFH was to be the “new normal” for local TV newsrooms in the US, if they believe that their newsroom was still “doing” good journalism, their thoughts on journalism innovation, and what they believe was the biggest challenge facing their newsroom today. Interviews were recorded and initially transcribed using Zoom’s built-in, auto-generated transcription service. A research assistant and one of the co-authors then reviewed each Zoom transcript against its audio recording and corrected the transcripts for any names or industry terminology that Zoom misinterpreted.

Second, to add to the managers’ perceptions of WFH, we also observed remote work at a single station in a large market in the same time period (not one of those whose news director was interviewed). The station is a market leader known for directing resources to ensure quality journalism. It wins multiple awards annually for its reporting and producing, making it a revelatory site to understand the adaptation of journalistic practices. Because of COVID restrictions, all data collection was completed via Zoom (similar to the protocol of Hendrickx & Picone, 2022). We requested access to the workplace, and were granted access to meetings and for interviews, but not to other communications channels in use, such as Slack or Teams, unlike Hendrickx & Picone (2022). Observations took place across five days in December 2020 and January 2021. The case study included weekly attendance at morning and afternoon newsroom meetings along with observations and informal interviews, for a total of 3 hours of meetings. The morning meetings lasted between 30 and 60 minutes. The afternoon meetings, as is commonly the case, were much shorter, lasting between 10 and 30 minutes.

During the first two group meetings observed, the researcher asked to be able observe journalists at work one-on-one: eight (all full-time employees) agreed to participate. Following each meeting, the researcher opened a Zoom room to observe workers for an average of one hour per worker (8 hours total). Of the 8 journalists observed, 4 were reporters (R1–R4 in the findings), 3 producers (P1–P3) and 1 manager (M) who is also the station’s chief investigator. The duration of observation was felt to be sufficient for the researcher to understand how work differed because of WFH, given the researcher’s prior understanding of news work.

During the observation, reporters were asked questions about their WFH routine (e.g., What have you already done since the morning meeting?) as well as their coworker interactions (e.g., What’s different about working with a photojournalist from home?). Producers were asked about their WFH routine (e.g., Describe your workday for me). Meetings and news work were not recorded for two reasons: traditional newsroom case studies do not commonly involve recording observations with video cameras and the investigator was not provided Zoom recording privileges. Instead, the investigator observed each meeting, typing notes in Word. Screen captures were made of attendance rosters and story assignments for the day. Because of the lack of verbatim recordings, we do not include direct quotations from these sources.

The study was reviewed and approved by the university’s Institutional Review Board (details omitted for review). Subjects provided verbal informed consent for interviews and observation and could request that particular answers not be recorded. Quotations included in this paper have been anonymized.

### *Data Analysis*

The interviews and observation datasets were subject to deductive coding. Transcripts and observation notes were uploaded into a qualitative research program. We developed codes for the

theoretical concepts identified in the review of the telework literature and that feature in our research questions, such as managerial control, professional and social isolation, mentorship and learning, productivity, work-life balance and work relationships. Coding was done by one of the authors and checked and discussed regularly with the others. Examining co-occurrences of these codes led to the findings presented, e.g., the co-occurrence of particular workers, tasks and technologies, and the problems and concerns about performing them during WFH.

## **Findings**

Our findings reveal a lot of commonalities across interviews, which was expected. News work is largely similar across stations, as stations in larger markets are typically in the financial position to experiment with innovative technology while stations in small markets copy those innovations (Henderson, 2021; Imre & Wenger, 2020). In this section, we describe the impacts on work and workers prompted by WFH, with particular attention to the role of technology, organized by the categories Hackman's (1987) team effectiveness model.

### *Task Output while Adapting to Hybrid Work*

During WFH, workers had to adapt to the need to work out of the newsroom using technology support. We first consider how workers individually carried out their work and created their outputs and the role of technology in adapting to COVID restrictions.

**Reporters and photographers.** As noted above, reporters and photographers primarily work in the field, so technology was already available to complete stories without coming into the newsroom. As a result, newsroom capacity limitations due to COVID affected but were not a serious challenge to getting work done. Stations possessed equipment such as cameras to record

and upload video from the field, and these were just sent home with the reporters or photographers. Reporters are accustomed to having to scramble to get a story and there was a sense that learning to work under the constraints of COVID, discussed below, was just another challenge. Indeed, some reported being more productive out of the newsroom, e.g., being less distracted or not having to travel and setup and breakdown equipment (Observation R5).

Video-conferencing was an important technology for work. Because COVID restrictions limited in-person contact, video conferencing often replaced in-person attendance at press conferences and even interviews, since many interviewees also had experience with tools like Zoom. As one respondent (Interviewee M5) commented: “Interview subjects have adapted to what we’re doing right here, which is, you know, conducting interviews over Zoom as you would conduct them in person.” While reporters might have to coach subjects on how to set up their camera to compose a good shot or to improve picture quality, video conferencing interviews were found to have benefits, for example, some systems can automatically generate a transcript of the call or the recorded video can be uploaded to a transcription service. Respondents also noted that the shift eliminated the time spent driving to interview in person, allowing that time to be used more productively, and made it possible to interview people beyond those in the local area. As one said:

You can get a Zoom with anybody, anytime, anywhere. Boom. There’s your, you know, there’s your interview and it’s, you know, I don’t hear ‘no’ anymore to anything. ... if I say, hey, I really want to get this great interview and they’re like, Yeah, I got it. Zoom. Boom. Done. ... you can talk to anybody, anywhere, and it’s just, it’s so great. (Interviewee M3)

When interviews were done via Zoom, reporters did not necessarily have to go into the field at all. They were provided with lighting and backdrops to equip a home studio from which they could introduce their stories using cameras with connectivity that could transmit live to the station

for immediate broadcast. They could even use a phone to record video with acceptable quality. News anchors could similarly present from home rather than from the newsroom.

The available technology also supported other tasks, meaning that COVID restrictions posed little or no disruption to these. Video editing for a story can be done on a laptop rather than at the station and the video uploaded to the station for broadcast, assuming the reporter has a sufficiently powerful laptop and sufficiently speedy internet service. Editing can even be done in the field and the video uploaded, for example, using a LiveU or even the Wi-Fi network at a Starbucks (Deuze & Witschge, 2018).

While the stories were successfully created and the news program put on the air, respondents noted some concerns about the quality of the stories. As noted, news interviewees implemented their own COVID restrictions, for example, not allowing non-employees such as reporters into a workplace. These restrictions on personal contact meant no face-to-face interviews in some cases; these were carried out instead while standing at a safe distance or by teleconferencing. Pitching a story included planning how to maintain the reporter's safety (Observation R4). While these interactions sufficed to get the story, respondents suggested that a video interview might limit what the reporter can ask, and by diminishing the dynamics of the interview and development of rapport, limit what they can get from the interview. As one noted:

Some of the stories don't turn out as interesting as they should. It's very easy nowadays to do a one-person interview story because that's all, you know, you spend all day trying to get somebody on Skype and you got that. (Interviewee M4)

Similarly, not having a reporter at a news conference meant that there was no opportunity to ask questions formally or informally: they were restricted to watching the broadcast. A news director (Interviewee M4) said: "Our city government is meeting virtually now ... it is not a very exciting way to do it. It's kind of easier for us to watch it on YouTube, but to talk to people afterwards, it's

not.” There was also a sense among respondents that not being out in the community reduced creativity. As one respondent said:

We don't stumble on stories like we used to. You know, you're at home, you're not driving back and forth to work, you're not out in the community where you get somebody's idea or somebody approaches you to get a better story... Being isolated keeps us from communicating with our fellow citizens and, therefore, I think our stories are not as interesting. (Interviewee M4)

In addition, as one observation subject noted, working remotely eliminated the opportunity to ask for informal feedback on a story as it was being written (Observation R1). Finally, multiple interviewees and observation subjects noted the difficulty of dealing with large video files out of news room.

Another problem when interviews were conducted via Zoom was that the photographer's role was greatly diminished (one observation subject (R2) described them as “stir crazy”), which also affected the quality of the storytelling. Photographers may be able to ask questions in an interview, but they cannot make that contribution if they are not included in a Zoom call. In a traditional setting, they also think about visuals they can add to the story based on what they can record (i.e., the B-roll). But if interviews are held at a distance, they might be able to get only building exteriors or stock footage, which are not visually compelling.

**Producers.** While reporters and photographers always worked in the field to a large extent and so were prepared to continue to do so, stations unexpectedly found that producers with laptops and Internet connections could also work from home, writing the show or editing video or graphics.

As one respondent noted:

What we were surprised to find out was that we could move producers to work remotely. I thought that was going to be the biggest challenge and in some days it was. However, it wasn't insurmountable. It wasn't even really that hard. (Interviewee L7)

As the pandemic emerged, staff needed to quickly figure out new ways to do things. Creative uses of the technology were described. One station technical director created Zoom accounts for the different feeds that would be referred to in the control room, allowing the producer to connect to them over Zoom. Another station used Discord for the same purpose. As a result, respondents found that it was even possible to produce a newscast from home. Someone must be in the station control room to implement directions about which source to put on the air (called “boothing the show”) but that person could be on a call with a producer rather than sitting next to them (indeed, the Democratic National Convention broadcast was directed from the director’s home, though with a lot more technology than a laptop). As one said:

They came up with this technology of boothing with this iPad. It’s a Zoom call they do for their newscast. They log into the Zoom to booth the show, so they're timing it there, they're talking to the talent, they're doing all that. And that’s really incredible technology. (Interviewee M3)

Of course, there were still technology issues to work around. For instance, a producer might identify a network feed they wanted to use in the show, but rather than simply downloading it to the server to include, they might have to ask someone at the station to retrieve it or download and upload it from home, which again can be problematic given the size of the files.

### *Team Member Growth and Fulfillment while Adapting to WFH*

We next consider the impact of WFH on team member growth and fulfillment. While the experience regarding respondents’ primary work tasks was mostly positive, WFH was not perceived by study respondents as successful in developing workers. Losses include a lack of opportunities for informal one-on-one interaction to support learning new tasks. Because of shifts in responsibilities and working conditions even before COVID, news directors have less time to do editorial work themselves. They could, however, do “drive-by editing,” that is, looking over a reporter’s shoulder as they edited a story and giving advice, or reviewing a story and giving

feedback. As one (Interviewee L2) commented, when people worked in the newsroom: “I may hear somebody, always keep my door open and I may hear someone talking about something and I want to chime in on how we should cover it.” Another noted:

I love newsrooms that have half of the newsroom, a lot of veterans that have been in the business in a while and then half of the newsroom young up and coming journalists and I think those are the best newsrooms because I think our veterans can learn from some of our younger employees and I know our younger employees can learn from some of our veteran journalists, so I feel like we're always constantly teaching each other. (Interviewee M1)

However, when the work is performed at home, there is little or no opportunity for informal mentoring from the news director or other journalists, which news directors found problematic. To provide training, a reporter and news director would have to intentionally set up a time for a discussion, which is difficult to fit in given the time pressure, though some reported setting up periodic group critiques and feedback sessions and one person mentioned giving training over Zoom to a remote hire (and its difficulty) (Observation P3). But the new medium took some adaptation: as one person (Interviewee M4) commented, “It’s hard to be critical in a nice way over the phone or over the Internet.” Conversely, one observation subject noted that it took much longer to learn to use a piece of software than expected because of the lack of guidance (Observation P1).

Further, from our data it is clear that there is a cost of WFH to workers in the lack of individual support, leading to feelings of isolation, as well as lack of enculturation and impacts on team cohesion. As noted above, COVID restrictions greatly reduced non-work-related interactions, e.g., a walk with a colleague between shows or time in a bar after work, both mentioned by an observation subject (R2). These interactions provide enculturation as well as emotional support in coping with the stresses of the job, which were of course exacerbated by the pandemic (Libert et al., 2022). News directors noted: “People felt very isolated and it was difficult to figure out how to help them through that” (Interviewee L7). Another commented: “These [the reporters] are kids

in many cases that are just out of college who have no friends in this town and all their friends were here” (Interviewee M4). In other words, while professional isolation may be less of an issue when everyone is remote (Waizenegger et al. 2020), social isolation continued to be a pressing problem. Work-life balance also was impacted by WFH, exacerbated by the stresses of the pandemic.

### *Team Viability while Adapting to WFH*

We finally consider the impact of WFH on team functioning. The work of developing a TV newscast has mostly pooled dependencies, meaning that the work to develop individual news stories is linked to the work of creating a news show, but not necessarily to each other. Each pair of reporter and photographer usually develop their story separately from others, coordinating with the producer. Even so, WFH hindered group functioning on a day-to-day basis. The distributed nature of the work led to uncertainty and problems with communication, for example, not being able to easily coordinate who will do something or letting one group know what the others have done. Reporters could mostly work independently but still would benefit from knowing how the story they are covering relates to others. One (Interviewee L3) commented: “I think that the people who are in the field are really starting to struggle because of that, they don’t have a big picture of what’s going on.”

As well, keeping track of assignments with distributed workers took extra effort. One news director described the station’s approach:

I have one EP [executive producer] who basically spent a whole day on Slack with the people working from home to figure out who’s doing which assignments and so the people working from home, say, it’s great. You know, I really like this. And I’m thinking, Well, it’s because, you know, poor [name] over here in the corner, who’s an EP, isn’t really looking up from her computer because she’s constantly updating people at home. (Interviewee L2)

The need for explicit interaction around work assignments particularly impacted the team's adaptability, as could be seen when managing work on breaking news stories. When everyone was physically co-present, the news director could walk into the newsroom to ask who was covering what aspects of the story and to avoid, for instance, redundant coverage of the story on different news programs or duplication of effort (Observation P2), for example, multiple reporters going after the same sources (Observation P1). Making these decisions took more effort with remote workers. As one news director said:

... now I have to set something up or Slack them or email them or maybe email multiple people on a team just to get a simple answer. So I'm spending more time personally as a news director trying to touch base with all of my members of my team. (Interviewee L1)

Technology only partly compensated for direct interaction in supporting coordination. Daily editorial meetings moved from in-person in the newsroom to via Zoom but provided only a single point of contact. For on-going communication among co-workers or for asking quick questions, newsrooms had implemented systems like Slack or Teams even before COVID. The use of these systems was reported to increase during WFH. For instance, one news director (Interviewee L7) reported an attempt to replicate the face-to-face experience: "The producers, on their own, what they did was they decided to have a Zoom meeting open all day and they talked as if they would naturally in the newsroom across desks via Zoom throughout the day." These conversations would not always include reporters though, who are not able to stay on Zoom while doing their work with sources or in the field.

Managers and observees also noted that different generations of workers have different comfort with technology and different preferences, some preferring Slack and others wanting to use email or text, but a coordination technology is only useful if it is universally adopted. There was an expectation that workers be adaptable and meet senior colleagues where they want to be, even if it reduced the utility of other channels. News directors could dictate the use of technology,

but that depended on their realization that they needed to do it. With all these different channels, a final problem was maintaining awareness without overloading people (Observation P1). For instance, different shows or shifts might have their own Slack channels for communication, but then find it necessary to read each other's channels to be aware of the stories an earlier show had covered and how (Observation P3).

While group cohesion is less of a concern than it might be in a team with strong reciprocal interdependencies, respondents also suggested that WFH has had an impact. For instance, to minimize the chances of spreading infection, one station had the same pairs of reporter and photographer work together long-term, but this structure greatly reduced (or even eliminated) interactions with other staff (Observation R3). Furthermore, the lockdowns imposed by COVID reduced opportunities for informal interaction (e.g., the bar after work) that were useful in maintaining group (as well as individual) morale. An observee noted that issues that would have been quickly resolved face-to-face “fester” when there's no opportunity to air them (Observation M). Another observee noted that the lack of interaction led to feelings of burnout (Observation R5). These findings echo those of García-Avilés et al. (2022).

## **Discussion**

In summary, during COVID, stations found that technology had improved to the point where it was in fact feasible for TV reporters and photographers to report on a story and for producers to create and produce a newscast from home, though the latter with some technological challenges. As they scrambled to adapt to COVID-induced restrictions, news workers were able to come up with creative ways to get the work done. We observed some interesting adaptations of technology, such as connection to the studio control room via Zoom (notably with in-person directors, audio technicians, and camera operators or robotic cameras). In other words, the COVID pandemic acted

in some cases as a prod towards the digital transformation of the work (García-Avilés et al., 2022; Willcocks, 2021).

A key question is, what factors in local TV news work made WFH as successful as it was, that is, for what other kinds of work might WFH be equally successful? As noted, the work of TV journalism has primarily pooled dependencies, with the producer in a central role, coordinating the work of the reporters and interfacing with other members of the production team. It may be that the type of interdependencies was one of the reasons that the shift to WFH worked as well as it did. Work that is more tightly coupled would presumably be harder to carry out in a distributed or hybrid mode. It is also important that reporters were accustomed to working from the field and had the training and equipment to do so, though it was a shift to not come to the newsroom at all. This finding mirrors the observation that those with experience teleworking were less stressed by WFH (Escudero-Castillo et al., 2021; Oksanen et al., 2021). That familiarity might be uncommon in other professions.

Considering the apparent success of WFH, many of the news directors interviewed (similar to many other managers) were considering continuing this mode of hybrid work even as the public health need abated. However, given the number of technicians who would need to remain in the studio, we do not expect current producers to continue to “booth” the show from home. There are also unanswered questions about the impact of non-local producers on the visual quality of the newscast and whether it will be acceptable to viewers in the long run. We do, however, see the possibility of expanded remote work opportunities in terms of writing and arranging newscasts up until the point of live production. And all news directors interviewed commented on the difficulties in hiring and retaining producers, so being able to do so remotely might be attractive despite the challenges. Respondents were notably more confident about continued WFH for reporters saying:

“I don’t know if our reporters are going to come back” (Interviewee M5). “There may really be no reason for the MMJs to travel into the station, do whatever little thing they're doing there and travel back out” (Interviewee L7). Further, Zoom interviews seem to be acceptable for routine stories.

There are clear advantages to employees in this mode of work, for example, not having to commute. The organizations also benefit, for example, in the savings of a physically smaller and less expensive newsroom. However, there are costs that seem to not be visible to the managers. For instance, employees faced numerous technical challenges, such as the data speeds needed to transfer large files, as well as bearing the costs of acquiring technology (laptop, Internet, phone) shifted in some cases from the employer to the employee, leading to greater stress.

As well, providing opportunities for informal learning or hands-on mentoring is harder to address when people are working remotely rather than in a shared workspace. Technology might provide a partial solution. For instance, a system like Twitch would enable a newcomer to watch someone else working as a kind of peripheral participation or for a manager to look over a worker’s shoulder as they perform a task. We wonder though if workers will be willing to spend time on learning activities given the pressures of their regular jobs. It might be workable if such a broadcast could be running in the background, enabling someone to pay partial attention and then tune in or ask questions when they saw something interesting.

A further concern with continued WFH is that responsibility for different kinds of work may shift in unexpected ways, i.e., changes in the division of labor or degree of specialization, as noted by Okopnyi et al. (2023). One respondent (Interviewee L7) noted the potential impact of changes on producers as the central node in the workflow, saying: “With every so-called efficiency that we come up with due to technology, what really happens is you put that job, whatever it’s come down

to, onto the producer.” For instance, the effort noted above to keep up-to-date on what work reporters were doing became extra work for an executive producer.

Longer-term, Willcocks (2021) forecasted shifts from full-time to contract employees as technology makes it easier to bring someone in for a short period. The economics of the news industry push towards reducing costs and many stations (and news outlets more generally) already rely on part-time contract employees (Deuze & Witschge, 2018; Marín-Sanchiz et al., 2023). WFH could accelerate this trend since it is easier to employ part-time or temporary workers if they can participate without having to come temporarily to a new work location, thus contributing to the increased precarity of news work (Deuze & Witschge, 2018).

If WFH is to be “the new normal,” it is important to identify ways to mitigate the negative outcomes observed on team member growth and fulfillment and team viability. As the threat of COVID starts to recede, it seems likely that reporters will begin socializing in person again, which could address emotional support and possibly enculturation. Enculturation of remote workers might also be supported by establishing virtual “water cooler” sessions for informal interaction in the absence of face-to-face encounters, parallel to the efforts to support learning. However, making time for such non-work interactions in a virtual setting requires sustained effort.

## **Conclusion**

This paper synthesizes past research on the impacts of telework and shows how these impacts change in the case of WFH. The study shows that technology and creative adaptation were sufficient to allow TV news workers (reporters, photographers and producers) to successfully create a news broadcast from home, due to worker experience with hybrid work and a low level of interdependencies among tasks. However, we also find that concerns raised about the impacts of telework on social isolation, opportunities for informal learning, and team coordination still apply

to WFH, despite advances in technology. Continued use of WFH will require further adaptations to address these issues. We suggest that informal learning may be the most problematic, as it is difficult to address and also is easy to ignore as it does not immediately impact day-to-day functioning. In contrast, we expect social isolation to ease with the lifting of COVID restrictions and team coordination issues to get more attention since they have a more visible impact.

Like all studies, the work presented here has limitations that might be addressed in future work. The main limitation is the scope of the data collection. As the situation was emergent, we conducted a short-term study with a limited number of participants. This limitation could be addressed by broader data collection. For example, we did not examine stations in small markets, which are less well-funded and so might have struggled more: a future study could examine a broader range of stations. As well, observation was done via Zoom. The study subjects were also interacting in this mode, but an in-person study (impossible at the time) might have revealed more about the work practices and how they adapted to the restrictions and the technology use. We also did not have access to systems such as Slack that were used for communication and coordination; these would provide an alternative perspective on how the work got done. Finally, a survey could be done to examine the themes of this paper more broadly, such as employee satisfaction with WFH.

Future work could address themes found in prior work that were not emphasized by our respondents, such as the role of teamwork and team synergy and how it was harmed or maintained, the role of personal characteristics or situations in successfully coping with WFH or the impacts on work-life balance. For instance, it is important to know if there were gender-differential impacts of WFH. Research could also examine the impacts of WFH on story quality as a factor in its long-term acceptability. Finally, given our findings regarding the negative impacts of WFH on

enculturation and training, it will be interesting to see how the circumstances of WFH affected workers who joined news organizations during COVID and how they are successful in the longer term.

### **Acknowledgments**

Omitted for review.

**Table 1: Interviewees**

<b>Interviewee ID</b>	<b>Position</b>	<b>Market size</b>
L1	Vice President of News and News director	Large
L2	Vice President of News (News director)	Large
L3	Director of reporting, also journalist	Large
L4	News director	Large
L5	News director	Large
L6	News director	Large
L7	News director	Large
M1	News director	Medium
M2	News director	Medium
M3	News director	Medium
M4	News director	Medium
M5	News director	Medium

## References

- Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological Science in the Public Interest, 16*(2), 40–68. <https://doi.org/10.1177/1529100615593273>
- Araújo, R., Lopes, F., Magalhães, O., Duff Burnay, C., Peixinho, A. T., & Almeida, C. (2024). The COVID-19 Pandemic in Portuguese Journalism. In *Communicating COVID-19: Media, Trust, and Public Engagement* (pp. 103–123). Springer. [https://doi.org/10.1007/978-3-031-41237-0\\_6](https://doi.org/10.1007/978-3-031-41237-0_6)
- Arcalas, J. E. Y., Tuazon, J. P. L., & Opiniano, J. M. (2022). How Journalists Cope with News Work's Stresses While Remaining Creative Amid the Covid-19 Pandemic: A Phenomenological Study. *Journalism Practice*. <https://doi.org/10.1080/17512786.2022.2151039>
- Backholm, K., & Idås, T. (2022). Journalists and the Coronavirus. How Changes in Work Environment Affected Psychological Health During the Pandemic. *Journalism Practice*. <https://doi.org/10.1080/17512786.2022.2098522>
- Baruch, Y. (2000). Teleworking: Benefits and pitfalls as perceived by professionals and managers. *New Technology, Work and Employment, 15*(1), 34–49. <https://doi.org/10.1111/1468-005X.00063>
- Belanger, F., Collins, R. W., & Cheney, P. H. (2001). Technology Requirements and Work Group Communication for Telecommuters. *Information Systems Research, 12*(2), 155–176. <https://doi.org/10.1287/isre.12.2.155.9695>
- Bick, A., Blandin, A., & Karel, M. (2020). *Work from Home Before and after the Covid-19 Outbreak* (FRB of Dallas Working Paper No. 2017). <http://dx.doi.org/10.24149/wp2017r2>

- Birkinshaw, J., Gudka, M., & D'Amato, V. (2021). The blinkered boss: How has managerial behavior changed with the shift to virtual working? *California Management Review*, 63(4), 5–26. <https://doi.org/10.1177/00081256211025823>
- Bloom, N., Liang, J., Roberts, J., & Ying, Z. J. (2015). Does Working from Home Work? Evidence from a Chinese Experiment. *The Quarterly Journal of Economics*, 130(1), 165–218. <https://doi.org/10.1093/qje/qju032>
- Casero-Ripollés, A. (2021). The impact of Covid-19 on journalism: A set of transformations in five domains. *Comunicacao e Sociedade*, 40, 53–69. [https://doi.org/10.17231/COMSOC.40\(2021\).3283](https://doi.org/10.17231/COMSOC.40(2021).3283)
- Couch, D. L., O'Sullivan, B., & Malatzky, C. (2021). What COVID-19 could mean for the future of “work from home”: The provocations of three women in the academy. *Gender, Work & Organization*, 28(S1), 266–275. <https://doi.org/10.1111/gwao.12548>
- Cushion, S. (2007). “On the beat” or in the classroom. *Journalism Practice*, 1(3), 421–434. <https://doi.org/10.1080/17512780701505234>
- Delanoëje, J., Verbruggen, M., & Germeys, L. (2019). Boundary role transitions: A day-to-day approach to explain the effects of home-based telework on work-to-home conflict and home-to-work conflict. *Human Relations*, 72(12), 1843–1868. <https://doi.org/10.1177/0018726718823071>
- Deuze, M., & Witschge, T. (2018). Beyond journalism: Theorizing the transformation of journalism. *Journalism*, 19(2), 165–181. <https://doi.org/10.1177/1464884916688550>
- Duxbury, L. E., Higgins, C. A., & Mills, S. (1992). After-Hours Telecommuting and Work-Family Conflict: A Comparative Analysis. *Information Systems Research*, 3(2), 173–190. <https://doi.org/10.1287/isre.3.2.173>

- Dworznik, G. (2018). Personal and organizational predictors of compassion fatigue symptoms in local television journalists. *Journalism Practice*, *12*(5), 640–656.  
<https://doi.org/10.1080/17512786.2017.1338532>
- Escudero-Castillo, I., Mato-Díaz, Fco. J., & Rodriguez-Alvarez, A. (2021). Furloughs, Teleworking and Other Work Situations during the COVID-19 Lockdown: Impact on Mental Well-Being. *International Journal of Environmental Research and Public Health*, *18*(6), 2898. <https://doi.org/10.3390/ijerph18062898>
- Fairweather, N. (1999). Surveillance in Employment: The Case of Teleworking. *Journal of Business Ethics*, *22*, 39–49. <https://doi.org/10.1023/A:1006104017646>
- Finneman, T., Mari, W., & Thomas, R. J. (2023). “I Didn’t Know How We Were Going to Survive”: U.S. Community Newspapers’ Resilience During COVID-19. *Journalism Practice*, *17*(5), 893–910. <https://doi.org/10.1080/17512786.2021.1957703>
- Finneman, T., & Thomas, R. J. (2022). “Our Company is in Survival Mode”: Metajournalistic Discourse on COVID-19’s Impact on U.S. Community Newspapers. *Journalism Practice*, *16*(10), 1965–1983. <https://doi.org/10.1080/17512786.2021.1888149>
- Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, *92*(6), 1524–1541. <https://doi.org/10.1037/0021-9010.92.6.1524>
- Gao, G., & Sai, L. (2020). Towards a ‘virtual’ world: Social isolation and struggles during the COVID-19 pandemic as single women living alone. *Gender, Work & Organization*, *27*(5), 754–762. <https://doi.org/10.1111/gwao.12468>
- García-Avilés, J. A., Arias-Robles, F., de Lara-González, A., Carvajal, M., Valero-Pastor, J. M.,

- & Mondéjar, D. (2022). How COVID-19 is Revamping Journalism: Newsroom Practices and Innovations in a Crisis Context. *Journalism Practice*.  
<https://doi.org/10.1080/17512786.2022.2139744>
- Golden, T. D. (2012). Altering the Effects of Work and Family Conflict on Exhaustion: Telework During Traditional and Nontraditional Work Hours. *Journal of Business and Psychology*, 27(3), 255–269. <https://doi.org/10.1007/s10869-011-9247-0>
- Golden, T. D., Veiga, J. F., & Dino, R. N. (2008). The impact of professional isolation on teleworker job performance and turnover intentions: Does time spent teleworking, interacting face-to-face, or having access to communication-enhancing technology matter? *Journal of Applied Psychology*, 93(6), 1412. <https://doi.org/10.1037/a0012722>
- Guo, S. Z., & Wang, D. (2022). Classroom vs. Newsroom: Journalism Education and Practice in the Digital Age. In *Digital Journalism in China* (pp. 99–112). Routledge.  
<https://doi.org/10.4324/9781003247579-9>
- Hackman, J. R. (1987). The design of work teams. In J. W. Lorsch (Ed.), *The Handbook of Organizational Behavior* (pp. 315–342). Englewood Cliffs, NJ: Prentice-Hall.
- Hardt, H. (1996). The end of journalism media and newswork in the United States. *Javnost - The Public*, 3(3), 21–41. <https://doi.org/10.1080/13183222.1996.11008630>
- Henderson, K. (2021). The seriousness of storytelling: What constraints to professional news routines reveal about the state of journalistic autonomy in local television newsrooms. *Journalism*, 22(9), 2259–2278. <https://doi.org/10.1177/1464884919854651>
- Hendrickx, J., & Picone, I. (2022). Operationalising Hybrid Newsroom Ethnography: Observing Amidst a Pandemic. *Journalism Practice*, 1–18.  
<https://doi.org/10.1080/17512786.2022.2062429>

- Hoak, G. (2021). Covering COVID: Journalists' Stress and Perceived Organizational Support While Reporting on the Pandemic. *Journalism and Mass Communication Quarterly*, 98(3), 854–874. <https://doi.org/10.1177/10776990211015105>
- Imre, I., & Wenger, D. (2020). Where newsroom leaders see technology facilitating innovation in local TV news. *Electronic News*, 14(4), 151–167. <https://doi.org/10.1177/1931243120963705>
- Iscan, O. F., & Naktiyok, A. (2005). Attitudes towards Telecommuting: The Turkish Case. *Journal of Information Technology*, 20(1), 52–63. <https://doi.org/10.1057/palgrave.jit.2000023>
- Kirchner, K., Ipsen, C., & Hansen, J. P. (2021). COVID-19 leadership challenges in knowledge work. *Knowledge Management Research and Practice*, 19(4), 493–500. <https://doi.org/10.1080/14778238.2021.1877579>
- Kurland, N. B., & Cooper, C. D. (2002). Manager control and employee isolation in telecommuting environments. *The Journal of High Technology Management Research*, 13(1), 107–126. [https://doi.org/10.1016/S1047-8310\(01\)00051-7](https://doi.org/10.1016/S1047-8310(01)00051-7)
- Kuruzovich, J., Paczkowski, W., Golden, T. D., Goodarzi, S., & Venkatesh, V. (2021). Telecommuting and job outcomes: A moderated mediation model of system use, software quality, and social Exchange. *Information & Management*, 58(3), 103431. <https://doi.org/10.1016/j.im.2021.103431>
- Libert, M., Le Cam, F., & Domingo, D. (2022). Belgian Journalists in Lockdown: Survey on Employment and Working Conditions and Representations of Their Role. *Journalism Studies*, 23(5–6), 588–610. <https://doi.org/10.1080/1461670X.2021.1944280>
- Lukan, T., & Čehovin Zajc, J. (2022). “If you don’t agree to be available 24/7, then you have

- nothing to do in journalism”: The boundary work tactics of precarious journalists. *Community, Work & Family*. <https://doi.org/10.1080/13668803.2022.2050356>
- Malone, T. W., & Crowston, K. (1994). The interdisciplinary study of coordination. *Computing Surveys*, 26(1), 87–119. <https://doi.org/10.1145/174666.174668>
- Mann, S., & Holdsworth, L. (2003). The psychological impact of teleworking: Stress, emotions and health. *New Technology, Work and Employment*, 18(3), 196–211. <https://doi.org/10.1111/1468-005X.00121>
- Marín-Sanchiz, C.-R., Carvajal, M., & González-Esteban, J.-L. (2023). Survival Strategies in Freelance Journalism: An Empowering Toolkit to Improve Professionals’ Working Conditions. *Journalism Practice*, 17(3), 450–473. <https://doi.org/10.1080/17512786.2021.1929414>
- Mathisen, B. R. (2019). Ethical boundaries among freelance journalists. *Journalism Practice*, 13(6), 639–656. <https://doi.org/10.1080/17512786.2018.1548301>
- Molyneux, L. (2018). Mobile News Consumption: A habit of snacking. *Digital Journalism*, 6(5), 634–650. <https://doi.org/10.1080/21670811.2017.1334567>
- Okopnyi, P., Guribye, F., Caruso, V., & Juhlin, O. (2023). Automation and redistribution of work: The impact of social distancing on live TV production. *Human-Computer Interaction*, 38(1), 1–24. <https://doi.org/10.1080/07370024.2021.1984917>
- Oksanen, A., Oksa, R., Savela, N., Mantere, E., Savolainen, I., & Kaakinen, M. (2021). COVID-19 crisis and digital stressors at work: A longitudinal study on the Finnish working population. *Computers in Human Behavior*, 122, 106853. <https://doi.org/10.1016/j.chb.2021.106853>
- Papper, B., & Henderson, K. (2023). 2022—A Challenging Year in Local TV News. *Electronic*

- News*, 17(3), 139–145. <https://doi.org/10.1177/1931243123118192>
- Reich, Z. (2013). The impact of technology on news reporting. *Journalism & Mass Communication Quarterly*, 90(3), 417–434. <https://doi.org/10.1177/1077699013493789>
- Santos, P., & Mare, A. (2021). The Reconfiguration of News Work in Southern Africa during the COVID-19 Pandemic. *Digital Journalism*, 9(9), 1391–1410.  
<https://doi.org/10.1080/21670811.2021.1974914>
- Sawyer, S., Crowston, K., & Wigand, R. T. (2014). Digital assemblages: Evidence and theorising from the computerisation of the US residential real estate industry. *New Technology, Work and Employment*, 29(1), 40–56. <https://doi.org/10.1111/ntwe.12020>
- Slattery, K. L., Doremus, M., & Marcus, L. (2001). Shifts in public affairs reporting on the network evening news: A move toward the sensational. *Journal of Broadcasting & Electronic Media*, 45(2), 290–302. [https://doi.org/10.1207/s15506878jobem4502\\_6](https://doi.org/10.1207/s15506878jobem4502_6)
- Subires-Mancera, M. P. (2023). Technology at the Service of Journalism and the Media in Pandemic: The Case of Television in Spain During the Period of Confinement. In *Smart Innovation, Systems and Technologies* (Vol. 318). Springer Nature Singapore.  
[https://doi.org/10.1007/978-981-19-6347-6\\_42](https://doi.org/10.1007/978-981-19-6347-6_42)
- Tandoc, E. C., Cheng, L., & Chew, M. (2022). Covering COVID: Changes in Work Routines and Journalists' Well-being in Singapore. *Journalism Studies*.  
<https://doi.org/10.1080/1461670X.2022.2112904>
- Teodorovicz, T., Sadun, R., Kun, A. L., & Shaer, O. (2022). How Does Working from Home during COVID-19 Affect What Managers Do? Evidence from Time-Use Studies. *Human-Computer Interaction*, 37(6), 532–557.  
<https://doi.org/10.1080/07370024.2021.1987908>

- Thompson, J. D. (1967). *Organizations in Action: Social Science Bases of Administrative Theory*. New York: McGraw-Hill.
- Trifonova Price, L., & Antonova, V. (2022). Challenges and Opportunities for Journalism in the Bulgarian COVID-19 Communication Ecology. *Journalism Practice*, 1–18.  
<https://doi.org/10.1080/17512786.2022.2118154>
- Velloso, C. (2022). Making soufflé with metal: Effects of the coronavirus pandemic on sports journalism practices. *Journalism*, 23(12), 2591–2607.  
<https://doi.org/10.1177/14648849221131725>
- Waizenegger, L., McKenna, B., Cai, W., & Bendz, T. (2020). An affordance perspective of team collaboration and enforced working from home during COVID-19. *European Journal of Information Systems*, 29(4), 429–442. <https://doi.org/10.1080/0960085X.2020.1800417>
- Willcocks, L. (2021). Robo-Apocalypse? Response and outlook on the post-COVID-19 future of work. *Journal of Information Technology*, 36(2), 188–194.  
<https://doi.org/10.1177/0268396220978660>
- Yap, C. S., & Tng, H. (1990). Factors associated with attitudes towards telecommuting. *Information & Management*, 19(4), 227–235. [https://doi.org/10.1016/0378-7206\(90\)90032-D](https://doi.org/10.1016/0378-7206(90)90032-D)