



Review

A Review of Telework in the COVID-19 Pandemic: Lessons Learned for Work-Life Balance?

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Abstract: The rationale for this review paper is to take stock of the current knowledge in the literature on the intersection of telework and work–life balance—an area that has grown in importance due to the impact of the COVID-19 pandemic. The review also considers the context of the government's role in pursuing policies to reduce the impacts of the pandemic in order to improve societal if not personal resilience, as these policies sometimes had unintended adverse impacts. After a section on the literature search method, sections follow on the literature considering telework/working from home, stress, and gender; work–life balance figures prominently in the papers reviewed. An additional category for the government and its role in concerns related to this topic follows. For future research, the differences between groups in responding to the demands of telework and work–life balance, particularly in regard to gender, are worth further investigation, as the COVID-19 pandemic has offered great challenges but also immense opportunities to learn and prepare organizations for future crises.

Keywords: COVID-19; telework; work-life balance; government; resilience; public health



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1. Introduction

The coronavirus disease 2019 (COVID-19) pandemic has caused widespread disruption throughout society. Impacts on employees and workplaces have been especially notable given the challenge of responding to "emotional suffering because of infection fear, job insecurity, dismissals menace, financial problems and the multiple effects of the crisis," while also reacting to the need to transition to different work patterns and contexts in order to provide organizational and service continuity to internal and external customers and clients alike [1]. One especially significant aspect has been the move toward telework/work-from-home arrangements (herein referred to as telework, but referred to elsewhere variously as flexible workplace practices, telecommuting, tele-exchange, virtual work, flexible work, e-work, freelancing, or remote work).

With societal lockdowns seen as among the worst of eventualities, telework has been viewed as a means of avoiding further lockdowns, as well as a way of avoiding the disease while continuing to work in an adaptive approach [2]. Telework has also been seen as a main source of organizational resilience amidst the crisis [3]. Telework was initially thought of as a quick way of responding [4], requiring little preparation or effort on the part of organizations given the widespread availability of computers and networked devices such as smartphones. In reality, the imposition of telework protocols under COVID-19 conditions was not as simple as might have been hoped, and it resulted in a variety of individual and societal complexities that deserve additional discussion.

While telework itself is not a new concept, the utilization of telework in the context of COVID-19 is different because it was/is required rather than chosen or offered as an option [5]. Telework continued to evolve from earlier use, mostly in managerial/professional contexts [6,7]. Because of urgency, the presence of lockdowns, customer needs, and strained resources, additional forms of work, including front-line customer service offered remotely,

were offered via telework, increasing the relevance of this form of job locating. While COVID-19 continues to impact society, there is a recognition that additional research is needed into the impact of the pandemic on telework and "life domains" [5] and into telework's impact on personal wellbeing, in addition to work and organizational performance [1]. This is especially true given the potential for the utilization of telework protocols to respond to future crises.

The rationale for this review paper is to take stock of the current knowledge in the literature in what is presently still a narrow area of study—the intersection of telework and work—life balance; it is nevertheless an area that has grown in importance due to the impact of the COVID-19 pandemic, and it will likely continue to be an issue given the prevalence of this approach to work. Moreover, beyond simply looking at the connection between telework and work—life balance, it is appropriate to consider new research in the context of the government's role in pursuing policies to reduce the impacts of the pandemic in order to improve societal if not personal resilience, as these policies sometimes had unintended adverse impacts.

After a section on telework prior to COVID-19, for comparative purposes, the literature search method for the topic during COVID-19 is discussed; sections follow on the literature considering telework/working from home, stress, and gender. Work-life balance figures prominently in the papers reviewed. An additional category for the government and its role in concerns regarding this topic follows. The review paper concludes with thoughts on the role of telework in COVID-19 and with recommendations for future research.

2. Telework Prior to COVID-19

Telework has roots in a conception of the *wired nation* [8] and *wired society* [9] in the 1970s, wherein interconnectivity via cable and phone lines would allow for interactions and communication for a host of purposes. Various forms of commerce—from banking to shopping, and even working—could occur via this wired environment, and there was recognition early on that these were essentially computer–network functions [10]. Decentralized, networked computer operations laid the groundwork for improved communications and learning structures, as well as telework; even in the late 1980s, there was an awareness that effort would have to be put forward to keep teleworkers included and from being marginalized members of the working community. Emphasis was to be on efficient communication, with less on work location [11]. These earlier visions have given way to a progressively "unwired digital city" [12]. This noted, these earlier views of telework remain quite relevant to how researchers perceive telework, even given the impact of the COVID-19 pandemic.

There has long been a recognition that organizations need to be flexible and adaptable. In particular, the speed of decision making is a major concern amid complex circumstances. With regard to work patterns, telecommuting is mentioned in the literature as a way for organization heads and chief executives to have additional flexibilities [13]. Batty noted that a change such as telework would be appealing from a financial perspective but that it might also cause massive shifts in other domains, such as transportation [14].

Consistent with the above, Probert and Wajcman drew distinctions about the various forms of working from home (outwork), specifically noting a shift for "technology outworkers" in word processors and computer programmers [15]—two forms of work that predate modern telework and yet show similarity with more modern forms. It is reasonable then that, from telework's first use in form approximating its modern versions, it was associated with managers and professional work, and "higher-status" households [6,7].

Previous research on telework was grouped by Ellison in 1999 [16] into the following categories: "definition, measurement, and scope of telework; management of teleworkers; travel-related impacts of telework; organizational culture and employee isolation; boundaries between "home" and "work"; and the impact of telework on the individual and the family" (p. 338). One can see in this literature of impacts during COVID-19 that some of these same thematic elements are still relevant in present telework research.

Despite the early indications of the promise of telework, prior to COVID-19, the literature on the topic sometimes suggested negative outcomes. Building relationships in the telework environment proved challenging, even before COVID-19 [17]. Caillier [18] found that "teleworkers (frequent and infrequent) did not consistently have higher levels of work motivation than nonteleworkers, providing only partial support for social exchange theory" (p. 461). de Vries, Tummers, and Bekkers [19] found that public officials "experience quite negative effects from teleworking, including greater professional isolation and less organizational commitment on the days that they worked entirely from home" in the days before COVID-19 (p. 570); the authors offered that this negative effect could be reduced through a consistent, trust-based, leader-member exchange. Negative impacts, though, may have much to do with managerial support; where employees do not report such support and do not telework, Lee and Kim [20] stated that "significantly lower levels of perceived fairness, job satisfaction, and intention to stay" were the result (p. 451). Not everyone eligible is offered telework, and this can lead to some disaffection among employees [21]—a point that remains relevant for current telework research—up to and through the COVID-19 pandemic.

3. Methods

The search for this literature review focused on the keywords government, resilience, and COVID; the phrase "work-life balance"; and telework, cybercommuting, or freelancing. The period under review was from 2020 to 2022 (roughly the period of the COVID-19 pandemic). The search was run on 12 July 2022, utilizing only peer-reviewed journal articles, on primo.exlibrisgroup.com (via the University of West Florida (UWF) library). There were 37 results for this narrow search. The university's OneSearch utilizes the ExLibris Central Discovery Index (CDI), which incorporates American Psychological Association, PubMed, Elsevier, and ProQuest databases (https://knowledge.exlibrisgroup.com/Primo/Content_Corner/Central_Discovery_Index/CDI_Record_Summary_and_Sources, accessed on 1 August 2022). Taking additional approaches may have resulted in finding additional papers, but this should not negate the value in exploring the themes among this group of papers in a more wide-ranging way, without exclusively resorting or limiting discussion to a quantitative content analysis.

Literature searches for this review began with few terms and broader considerations of what might be important in the COVID-19 pandemic. However, the COVID-19 pandemic literature, two years in, is already extensive, including several journals (*COVID* included) that are focused mostly or entirely on the impact of this pandemic on the disease itself and the societal response. COVID and telework, for example, yield 829 results from the university's library search as of 25 August 2022. The addition of "work-life balance" shows 277 papers on the topic.

The addition of the keywords *resilience* and *government* was thought essential to this review for several reasons. First, the addition of the resilience keyword adds potential to consider how telework contributed to a response that reduced personal and organization vulnerability, and led to a faster, more complete return to productivity (or something approaching productivity, all things considered). Second, there is a need to understand how the government's role with respect to telework is being perceived and handled in the literature. Finally, there is a need to address whether learning and understanding on an organizational basis has occurred where telework is concerned, whether there were any major issues found in the literature that should be addressed for the future use of telework, and how this may play in increasing personal and organizational resilience.

To identify major topic areas, the 37 papers identified for this study were first analyzed on WordStat 9. As noted above, three major topics found in this preliminary analysis were included here: telework/working from home, stress, and gender; each topic was covered in turn, with impacts on work-life balance noted.

4. Discussion

4.1. Working from Home: Conventional Telework and Crisis Telework

Telecommuting (interchangeably used with telework) is an approach to workplace planning that "allows workers to work from a location other than the corporate office, usually from home. Telecommuting also saves the company money because they don't have to have office space for all the employees. It provides another form of autonomy . . . telecommuters [need to] receive opportunities to engage with coworkers and receive feedback concerning their work" [22] (p. 119). In addition to saving money for the organization, money is saved by the employee because they do not have to commute. This is an aid to work-life balance, which refers to and "measures one's ability to understand and manage responsibilities to others across multiple life roles" [23] (p. 20). Health benefits can also accrue, as there is some evidence that there is a lower incidence of burnout and heart attacks among teleworkers [24]. There is evidence that telework increases productivity, as outlined in the literature review conducted by Bocean, Puiu, and Varzaru [25]. Telework can also result in increased economic profitability [24]. Telework offers the opportunity for organizations to become nimble and faster; because people do not have to commute, there are also environmental protection benefits [3], hence a connection to sustainability. Still, telework has resulted in increased energy consumption in homes, which has environmental consequences [26].

Telework, as a function of decentralization, was introduced under crisis conditions in the 1970s as a way of addressing work needs when gas prices were exorbitantly high [27]; the telework concept was helped along in the early 2000s by improvements in information technology [4]. In the context of COVID-19, working from home (again, used interchangeably with telework) is thought to be "a temporary, alternative working arrangement. It requires a shared responsibility and commitment by both employers and workers to ensure business continuity and employment" [28] (p. 5).

Appropriate technology is needed to make teleworking possible [3,29]; this was particularly evident during the pandemic, with networks being overloaded with online meetings and connectivity being unstable. If the government is requiring workers to engage in telework through a lockdown, then some discussion about infrastructure support and technology is appropriate; planning would be a requisite for dealing with any future events that may require measures to include the widespread use of telework in an emergency or catastrophic situation [30]. Teleworkers must have computers and access to the Internet that allows for connectivity at a rate appropriate for online conferencing. It was a challenge in the early days of the pandemic response to ensure that all remote workers had both the equipment and connectivity necessary to appropriately perform their jobs [31,32]. Gaps can exist between generations of computer users and their acumen and readiness to work in a purely virtual environment [3]. Mahapatra and Dash [33] offered that the COVID-19 pandemic served as a shock that demanded career re-envisioning but also adaptability.

In their study of the response of Romanian small- and micro-enterprises to COVID-19, Păunescu and Mátyus [34] suggested that telework was a way of protecting employees against the disease. They wrote that "COVID-19 stimulated the biggest social experiment of teleworking across the countries, forcing governments to approach flexible working as a required solution not as an option" (p. 442). Telework was among the top answers from businesses for useful resilience actions after hygiene-related responses, though telework as a variable of its own was inconclusive as a determining factor for a company overcoming illness. Responding to the emergency and protecting employees from disease via telework is a dynamic echoed by other authors, including Raghavan et al. [31], who suggested that telework is part of a "new normal" that will go on after COVID-19; Akos, Leonard, and Hutson also suggested that there is some evidence that the ongoing substantial use of telework is "here to stay", with COVID-19 being the accelerant for change that was already in process [23].

Bhandari and Sharma [35] wrote that working remotely is associated with high job satisfaction. Núñez-Sánchez and colleagues [36] wrote that telework did indeed reduce the risk associated with COVID-19, though it also led to sedentary outcomes and worrisome

physical inactivity. Still, this outcome is modifiable and can be dealt with through exercise. It has also been suggested that telework is a tool to help people meet devastating financial concerns caused by the pandemic, because even keeping people minimally employed is better than no employment at all [37].

Countering Lussier and Hendon [22], telework may not offer new autonomy, but it could reorder control and reshape organizational norms [3]. This is at least until telework ends and people are forced to return to offices [38], as there continues to be a preference for in-office interaction [30]. The amount of autonomy available as a particular outcome of telework may depend largely on the role one has in the organization and, thus, the trust available to the role and the incumbent [35].

Telework can be difficult for managers because it can be problematic to track employee time and productivity [35], even if employees often anecdotally report that teleworking arrangements make them more productive. If managers do not trust employees in an office environment, they will certainly not trust them in an online environment either. Managers may not be willing to answer the additional calls of complexity in communication with the commitment necessary to make telework work for all employees [3,32].

Stephens et al. [39] observed that, even though there was some distrust of telework in the literature, COVID-19 had possibly presented an instance when management no longer had a choice in trusting employees, perhaps echoing the pre-COVID-19 sentiment of de Vries and colleagues [19]. Stephens and colleagues also observed that the need to provide support for telework had shown considerable skill gaps related to working in the virtual workplace [39]. Long-term teleworkers may lack social skills, and organizational culture might be weakened in an in-person office [25]. An increased workload in the teleworking environment might be noted. Bhandari and Sharma [35] wrote of the potential for work-life balance disruption due to long work hours. The time supposedly saved from working remotely may end up being used for additional work. Of interest is the existence and transmission of organizational culture in the virtual environment, including "new norms" and "virtual rituals" (p. 448).

Qian and Hu [40] observed that college graduates are more likely to be afforded telework opportunities, and financially well-to-do families are better able to protect themselves from health problems, while balancing family care needs and protecting their economic livelihoods. Work–life balance can be a challenge for teleworking students, because their time management skills may still be lacking [29].

Telework did not always pose a great shift. In South Korea, for example, telework was limited to only a few days a week, so COVID-19 did not fundamentally change the way managers did their jobs [5]. It is also entirely reasonable that additional telework experience on both employee and manager sides will yield improved outcomes [41] for both productivity and personal wellbeing; this may address the initial inefficiencies associated with the shock of COVID-19 and the subsequent movement toward success in new ways of working.

4.2. Stress

The issue of telework's impacts on work-life balance is mostly still a secondary consideration to the immediate COVID-19 response and primary considerations such as productivity. The paper by Rathnaweera and Jayathilaka [42] points out the gap that exists in connecting telework and work-life balance. Stress is a major point in many of the papers reviewed here.

Telework is not always positive. Working in virtual environments can be a source of stress [40]. The format of telework itself may raise concerns, as using a computer may encourage cyber-bullying behaviors [2]. There is potential that, even though telework arrangements can be used to support insecure employment structures, such as temporary work or arrangements that favor increasing workloads and diminished control [41], working hours can increase [26]. Privacy concerns and hacking can be a concern given the online environment, as observed by Hassankhani and colleagues [43]. Given the potential for

work practices bordering on abuse, the need for HR professionals to maintain control and provide supportive structures is even more important.

Syrek and colleagues [38] referred to the period of telework during lockdown as "forced telework", noting how it departed significantly from normal telework patterns, particularly with regard to social supportive structures for employees. Because the way people work is changing, supportive structures are important, and the blurring of lines between work and home life can be doubly concerning when inadequate attention is paid to how work and its context has changed [44]. As an alternative to the view of "forced telework", there was also a fair amount of signaling from corporations about concern for employees, translating to allowance for telework and the connection to work–life balance [45], and it was seen as a benefit, so this may be a matter of perspective.

There is research that suggests that distress and stress have increased for teleworkers relative to pre-COVID-19 and to in-person workers, though other research suggests no difference between the groups, so, at this point, the results are inconclusive overall. Uncertainty and threat play a large role in life during COVID-19, and the notion that response is simply or only attributable to telework is perhaps mistaken. It is possible to begin to draw lessons and inferences from research into telework and the COVID-19 response. The notion of interpersonal conflict and the lack of work–family balance among teleworkers should give pause.

Adapting to stress can be thought of in terms of Sense of Coherence (SOC), which refers to "people's ability to perceive a stressful situation as understandable, manageable, and meaningful, allowing them to use their resources to effectively deal with it" [46] (p. 3). SOC plays a role in personal wellbeing, and this, in turn, is related to work–life balance as a protecting factor against job-related stress [46].

Hassankhani and colleagues [43] noted that work-life balance due to telework should neither be assumed nor denied on its face. There are aspects that can lead to increased balance, but because of the nature of telework, the precarious boundary between work and homelife can be threatened. The home environment can be distracting during telework. Employees must be motivated and stay focused to complete tasks. Personal concerns and priorities can interfere with work priorities and vice versa, leading to problems in succeeding in both areas [3].

Lange and Kayser [47] suggested that being able to work remotely can reduce work stress by "reducing commuting times, increased flexibility, productivity or an improved balance" but that it can increase stress through "presenteeism, work-family conflict, social isolation and declining health behaviors such as physical activity during afterwork hours" while also causing depression and fatigue (p. 3). Prager and colleagues highlighted the potential that employees could have job status and security fears due to teleworking, given a preference for in-person, in-office interactions [48].

While telework offered the potential for convenience, comfort, and safety, social concerns, such as isolation, anxiety, and loneliness, can be experienced as pronounced negatives. The COVID-19 pandemic has caused emotional stress, and even with telework, which can help employees achieve organizational and individual career goals, exhaustion from the transition to home work arrangements has resulted for many [2].

Loneliness is increasingly being experienced not only due to COVID-19's social distancing and isolation schemes but also due to telework [49] and a society more dependent on computers and smartphones, which, while keeping us connected, nevertheless seem to isolate us in the real world. This has implications for telework and the divide between virtual work and in-person interactions. The experience of working from home was perhaps enjoyable at first, but then grew annoying or overwhelming for some. The inability to balance work and family time is a theme. It was difficult for many, for example, to try to be available for customers and family (especially children) at the same time. There is a need to compartmentalize work and home responsibilities—perhaps having a workspace with a door to avoid interruptions, or otherwise acting as if one is physically going to work in order to mentally prepare oneself for the tasks at hand [50]. However, the Rudolph study

echoes other research that suggests that, for those who appreciate telework, additional productivity and even a peaceful feeling can be supported for those individuals with clear work policies [4].

While telework has been a help for businesses and organizations seeking to remain productive and in service to customers/clients during the pandemic, it is clear that telework has not necessarily provided a remedy for exhaustion related to the pandemic, or to fatigue relative to the implements of telework. Zoom fatigue is, for many, a real phenomenon, and there is a need to compare work arrangements under the pandemic to what was considered normal before COVID-19 took hold. It is suggested that telework affected work–life balance in a negative way, causing conflict between work and home; this was possibly coupled with changing responsibilities due to childcare needs, anxiety, and the suppression and disturbance of emotions [51]. Uncertainty about the pandemic undermined the potential for positive emotions and responses [52].

4.3. Gender

A simple change of work venue to home does not solve fundamental issues in balancing home and work. Telework does not, on its own, allow for work–life balance, because it may not allow for the choice of work times [3]. As a result, the same conflicts between work and personal priorities continue, even if work is being done in the home environment. These changes and conflicts can be experienced differently as a result of a variety of factors but, according to the literature to date, most notably with respect to gender.

Gender imbalances, too, should be of concern to those engaging in research in this area, and the research covered in this review provides an indication of where researchers have looked and where future research might continue to explore [53]. Gender-based inequalities and impacts on work–life balance are primary challenges presented by the COVID-19 response [54]. This might seem at least somewhat surprising given that Ellison [16] also noted this as being a key issue for telework research generally; there was no reason to believe that gender would not be a serious issue for telework during COVID-19.

Stephens et al. [39] acknowledged the impact of COVID-19 on work-life balance, specifically calling out differences along the lines of "gender, race, class, age, ability, virus exposure status" (p. 443). Donoso, Valderrama, and LaBrenz [55] also noted how telework could enhance gender disparities; for academic mothers, rather than reducing uncertainty and concern, telework created its own concerns with work-life balance, eliminating important boundaries. As noted previously, not everyone is eligible for telework. Navas-Martín and colleagues [52] observed that women were more likely to be responsible for care and the home during the COVID-19 response and that individuals over 55 were less likely to engage in teleworking. Syrek and colleagues [38] suggested that imbalance was particularly seen with younger people, because they lack supportive structures and have to care for small children [48].

The differences between voluntary telework and that experienced during COVID-19 are prominent. There is evidence that, if an individual enjoys the telework format, this will have benefits for productivity and wellbeing [1]. From the perspective of gender sensitivity, though, the workplace in the out-of-office environment during COVID-19 has necessarily been at home (rather than in a shared office, in coffee shops, or in other public work arrangements). Children have often been in the home during work hours, engaged in virtual schooling rather than in traditional school environments. Social relations have been strained given the COVID-19-induced isolation. While telework in a conventional sense may allow for increased work–life balance, during COVID-19, this was not always the case, and it likely varied depending on the demographics of the individuals and their family situations.

There is evidence that, with respect to work–life balancing during the pandemic, space and time boundaries disappeared in some instances (specifically caring for children) along gender lines, and this impacted coping skills and the ability to work remotely. Having meaningful activities can help one's mental outlook [52]. Still, the ability to adapt and

improvise has limits, and the impact on families has been, in many cases, far-reaching and significant; the lack of control experienced by mothers, in particular, while trying to work and care for children was often severe and frustrating [56]. Rathnaweera and Jayathilaka found that gender and the number of children influence work balance in the telework environment [42]. Other researchers have also noted this. Women are particularly affected, causing work-related stress, due to this care imbalance [46]. Under "forced telework", gender inequality is evidenced in high relief, given closed schools and daycares, and the expectation that people, often women, will continue to work and be productive while also serving as primary caregivers for children [38].

This is well evidenced in Rudolph et al. [50], who noted that "one of the first best practice recommendations given to new telecommuters is to make sure that telecommuting is not used as a form of childcare. Indeed, some organizations require telecommuters with children to sign a formal contract stating that they have alternative childcare arrangements" (p. 19), and that the COVID-19 pandemic had set this "best practice" in a particularly inappropriate light, given the lack of childcare and closed schools.

Others counter that telework is not automatically a net negative based upon vulnerable or marginalized groups. Antonacopoulou and Georgiadou [57] countered that the "fact that this way of working is not centred around a specific work place affirms the positive benefits of this form of work, such as empowerment of vulnerable social groups, activation of marginalized social groups and environmental protection" (p. 756).

Work–family relationship balance is essential, especially in a telework environment, because it can help reduce stress; without attention to work–life balance, job performance may suffer. As a result, the literature recommends family enrichment in telework environments [2]. Rathnaweera and Jayathilaka [42] wrote that, in a Sri Lankan study, "Findings discovered that employee-related aspects of family roles significantly affect the success of both private and government sector workers" (p. 5), and there is reason to conduct further research about the experience of government workers on this point elsewhere.

This suggests that, in the event of future pandemics or emergencies, if telework is required, there should be better efforts to provide for family needs rather than a general expectation on the part of businesses and governments to simply deal with changed circumstances and still produce optimally.

4.4. Government's Role

COVID-19 has been a societal crisis, so it is no surprise that government appears frequently in articles related to this topic. Across these 37 papers, "government" appears 193 times, in the context of social media; guidance on response; and the availability of relief measures, incentives, and programs. Of interest to the topic of this review, many instances involved working from home, remote work, and mental health. The strictness of government interventions to control the pandemic, as part of describing the forced telework during lockdown, is discussed in a particularly critical way [1,3,38,40]. The imposition of laws on remote work might add to the stress of the COVID-19 response; the already challenging lockdown is emblematic of this fault finding.

During COVID-19, it was not always clear what the government's best role was supposed to be. Perhaps the clearest role for the government was to provide information to the public and businesses that is both authentic and helpful [43]—this did not always occur during the pandemic, and it made public responses more difficult and likely increased stress, reducing the potential for work–life balance. The same paper mentioned the government's role in providing support for infrastructure to support remote roles (including learning) [43]. One paper offered that government facilities might be used as co-working spaces [48]. The government's role as a guide to the public for the need to manage stress is another aspect supported by messaging [50]. Because work–family conflict can lead to burnout, there is a clear and obvious need for intervention in this area, and government support for such an effort is the most likely candidate [2].

There was also discussion about the government's inability to incentivize change through policies [48]. The public is obviously interested in subsidies, for example, but from a policy perspective, these might not be the most advantageous approaches, as they may not change behaviors, and they may result in damage to the larger economy. Bocean et al. [25] noted that governments may have an interest in supporting improvements in infrastructure (5G, for example) to support telework because of the economic enhancement, but this does not necessarily show learning and awareness of the usefulness to respond to further and future crises. Moving beyond the initial shock of the pandemic and into a period of reimagining allowed organizations to at least start to see a new way forward for operation and service delivery [30].

5. Conclusions and Recommendations for Future Research

This paper has reviewed the studies conducted during the COVID-19 pandemic on the intersection of work-life balance and telework, where resilience and the government are factors. One can see that the ongoing use of telework can present a need for cultural change in organizations, which can be achieved through "information campaigns on good practice models and highlighting benefits beyond economic performance, such as reducing environmental impact and improving work-life balance" [25] (p. 13). Because telework has had clear benefits, including economic benefits, some have suggested a strong likelihood of the increased use of telework [25] rather than a return to a previous pre-pandemic workplace normal. Given this, it is important to understand how work occurs in telework and what can be done to facilitate improved outcomes from all perspectives. It would be worth giving additional attention to various forms of work appropriate for telework. While more types of work were associated with telework during COVID-19, it is apparent that not all kinds of work are appropriate for telework (many healthcare workers, transportation and transit workers, and corrections officials, among others, were not given telework assignments). Making sense of the differences among the various types of work and how to maximize benefits in a telework environment, to the extent it is available and appropriate, would be especially useful.

Additionally, it would not be appropriate to simply assume that, because technology is widely available, working in a virtual environment will be a success, or that the very human aspect of employment will naturally take care of itself. If anything, during a crisis, additional effort and resources should be expended to address such factors in order to ensure a healthy and productive workforce. This can lead to strong and industrious individuals and families, which feeds back into benefits for society.

For future research, the differences between groups in responding to the demands of telework and work–life balance are worth further investigation, as the COVID-19 pandemic offers great challenges but also immense opportunities to learn and prepare organizations for future crises. The point raised in many papers about unequal impacts with regard to gender is notable and must be addressed by organizations implementing telework, especially forced or government-mandated telework in the event of the extension of this crisis or future crises that may demand similar responses. This branch of the literature, considering impacts relative to gender, is perhaps one of the most fruitful in the period studied in this literature review, with potential still for more research and a greater understanding.

Even with the problems experienced, there is still a widespread interest in continuing to telework and to have the option available [54]. Telework makes sense, not only from the perspective of employee job satisfaction, productivity, and cost savings but also from an organizational perspective, with the caveat that gender-specific vulnerabilities must be addressed appropriately and fully. There is likely an expectation in some quarters that telework should become the norm, even if on a more limited basis, with telework being offered a few days a week in some sectors [41]. Furthermore, there are divides that still exist that may limit the potential of telework going forward; for example, differences may exist in high-speed internet connectivity between city and rural areas, which may lag behind the speed and bandwidth necessary to fully engage in the digital workspace. There may also

be a divide among cities, based upon infrastructure to support telework, not to mention socio-economic factors that limit access.

This area of the literature should be of great interest to researchers, and the products of this research may be of considerable benefit to government agencies working to create and implement policies to protect individuals and society, and businesses seeking to continue operation and serve clients and customers.

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References

 Blahopoulou, J.; Ortiz-Bonnin, S.; Montañez-Juan, M.; Espinosa, G.T.; García-Buades, M.E. Telework Satisfaction, Wellbeing and Performance in the Digital Era. Lessons Learned during COVID-19 Lockdown in Spain. Curr. Psychol. 2022, 41, 2507–2520. [CrossRef]

- Ayoko, O.; Caputo, A.; Mendy, J. Management Research Contributions to the COVID-19: A Bibliometric Literature Review and Analysis of the Contributions from the Journal of Management & Organization. J. Manag. Organ. 2021, 27, 1183–1209. [CrossRef]
- Raišienė, A.G.; Rapuano, V.; Dőry, T.; Varkulevičiūtė, K. Does telework work? Gauging challenges of telecommuting to adapt to a new normal. Hum. Technol. 2021, 17, 126–144.
- 4. Iwu, C.G.; Okeke-Uzodike, O.E.; Anwana, E.; Iwu, C.H.; Esambe, E.E. Experiences of Academics Working from Home during COVID-19: A Qualitative View from Selected South African Universities. *Challenges* **2022**, *13*, 16. [CrossRef]
- 5. Rose, P.A.; Brown, S. Reconstructing Attitudes towards Work from Home during COVID-19: A Survey of South Korean Managers. *Behav. Sci.* **2021**, *11*, 163. [CrossRef] [PubMed]
- 6. Olson, M.H. Telework. In *Technology and the Transformation of White-Collar Work*; Kraut, R.E., Ed.; Lawrence Erlbaum Assoc: Hillsdale, NJ, USA, 1987; pp. 135–152.
- 7. Dutton, W.H.; Sweet, P.L.; Rogers, E.M. Socioeconomic Status and the Early Diffusion of Personal Computing in the United States. *Soc. Sci. Comput. Rev.* **1989**, *7*, 259–271. [CrossRef]
- 8. Smith, R.L. *The Wired Nation*; The Nation Company: New York, NY, USA, 1970.
- 9. Martin, J. *The Wired Society*; Prentice Hall: Englewood Cliffs, NJ, USA, 1978.
- 10. Hepworth, M.E. Planning for the Information City: The Challenge and Response. Urban Stud. 1990, 27, 537–558. [CrossRef]
- 11. Holtham, C. Information Technology Management into the 1990s: A Position Paper. J. Inf. Technol. 1989, 4, 179–196. [CrossRef]
- 12. Dutton, W.H. Wired City. In *The Wiley Blackwell Encyclopedia of Urban and Regional Studies*; Orum, A., Ed.; John Wiley & Sons Inc.: New York, NY, USA, 2019.
- 13. Coulson-Thomas, C. The Responsive Organisation. J. Gen. Manag. 1990, 15, 21–31. [CrossRef]
- 14. Batty, M. Invisible Cities. Environ. Plan. B Plan. Des. 1990, 17, 127–130. [CrossRef]
- 15. Probert, B.; Wajcman, J. Technological Change and the Future of Work. J. Ind. Relat. 1988, 30, 432–448. [CrossRef]
- 16. Ellison, N.B. Social Impacts: New Perspectives on Telework. Soc. Sci. Comput. Rev. 1999, 17, 338–356. [CrossRef]
- 17. Long, Z.; Kuang, K.; Buzzanell, P.M. Legitimizing and Elevating Telework: Chinese Constructions of a Nonstandard Work Arrangement. *J. Bus. Tech. Commun.* **2013**, 27, 243–262. [CrossRef]
- 18. Caillier, J.G. The Impact of Teleworking on Work Motivation in a U.S. Federal Government Agency. *Am. Rev. Public Adm.* **2012**, 42, 461–480. [CrossRef]
- 19. de Vries, H.; Tummers, L.; Bekkers, V. The Benefits of Teleworking in the Public Sector: Reality or Rhetoric? *Rev. Public Pers. Adm.* **2019**, *39*, *570*–*593*. [CrossRef]
- 20. Lee, D.; Kim, S.Y. A Quasi-Experimental Examination of Telework Eligibility and Participation in the US federal government. *Rev. Public Pers. Adm.* **2018**, *38*, 451–471. [CrossRef]
- 21. Mahler, J. The Telework Divide: Managerial and Personnel Challenges of Telework. *Rev. Public Pers. Adm.* **2012**, 32, 407–418. [CrossRef]
- 22. Lussier, R.N.; Hendon, J.R. *Human Resource Management: Functions, Applications, and Skill Development,* 4th ed.; Sage Publications: Thousand Oaks, CA, USA, 2022.
- 23. Akos, P.; Leonard, A.J.; Hutson, B. Virtual Federal Work-Study and Student Career Development. *Career Dev. Q.* **2022**, 70, 16–26. [CrossRef]
- 24. Moglia, M.; Hopkins, J.; Bardoel, A. Telework, Hybrid Work and the United Nation's Sustainable Development Goals: Towards Policy Coherence. *Sustainability* **2021**, *13*, 9222. [CrossRef]
- 25. Bocean, C.G.; Puiu, S.; Vărzaru, A.A. Paradigm Shifting—The Use of Mobile Communications at Work and the Subsequent Effects. *Electronics* **2021**, *10*, 2747. [CrossRef]

26. Hutama, S.F.; Ghifari, M.Y.A.; Ula, I.T.; Yong, S.D.; Soemardiono, B.; Septanti, D.; Sekartaji, D.; Novianto, D. Analysis on the Effect of Home Appliances Use to Electricity Consumption during WFH. *IOP Conf. Ser. Earth Environ. Sci.* 2022, 1007, 012010. [CrossRef]

- 27. Nilles, J.M. Telecommunications and organizational decentralization. IEEE Trans. Commun. 1975, 23, 1142–1147. [CrossRef]
- 28. International Labour Organization. An Employers' Guide on Working from Home in Response to the Outbreak of COVID-19. 2020. Available online: https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---act_emp/documents/publication/wcms_745024.pdf (accessed on 1 August 2022).
- Bowen, T. Work-Integrated Learning Placements and Remote Working: Experiential Learning Online. Int. J. Work-Integr. Learn. 2020, 21, 377–386.
- 30. Khan, S.A.R.; Godil, D.I.; Bibi, M.; Yu, Z.; Rizvi, S.M.A. The Economic and Social Impact of Teleworking in Romania: Present Practices and Post Pandemic Developments. *Amfiteatru Econ.* **2021**, *23*, 787–804.
- 31. Raghavan, A.; Demircioglu, M.A.; Orazgaliyev, S. COVID-19 and the New Normal of Organizations and Employees: An Overview. *Sustainability* **2021**, *13*, 11942. [CrossRef]
- 32. Atkinson, C.L. Never in Our Imaginations: The Public Human Resources Response to COVID-19 in Northwest Florida. *COVID* **2022**, *2*, 102–116. [CrossRef]
- 33. Mahapatra, G.; Dash, S. Future of Mid-Career Education in a Transforming Work Context: A Review of Literature and Directions for Future Research. *South Asian J. Manag.* **2021**, *28*, 31–56.
- 34. Păunescu, C.; Mátyus, E. Resilience Measures to Dealing with COVID-19 Pandemic. Evidence from Romanian Micro and Small Enterprises. *Manag. Mark. Chall. Knowl. Soc.* **2020**, *15*, 439–457. [CrossRef]
- 35. Bhandari, S.; Sharma, L. Impact of COVID-19 on the Mental Well-Being of Employees: A Study of Mental Wellness of Employees during COVID-19 in India. *Cardiometry* **2021**, *19*, 78–89. [CrossRef]
- 36. Núñez-Sánchez, J.M.; Gómez-Chacón, R.; Jambrino-Maldonado, C.; García-Fernández, J. Corporate Well-Being Programme in COVID-19 Times. *Mahou San Miguel Case Study. Sustain.* **2021**, *13*, 6189. [CrossRef]
- 37. de Miquel, C.; Domènech-Abella, J.; Felez-Nobrega, M.; Cristóbal-Narváez, P.; Mortier, P.; Vilagut, G.; Alonso, J. The Mental Health of Employees with Job Loss and Income Loss during the COVID-19 Pandemic: The Mediating Role of Perceived Financial Stress. *Int. J. Environ. Res. Public Health* 2022, 19, 3158. [CrossRef] [PubMed]
- Syrek, C.; Kühnel, J.V.-H.T.; Bloom, J. Being an Accountant, Cook, Entertainer and Teacher—All at the Same Time: Changes in Employees' Work and Work-Related Well-Being during the Coronavirus (COVID-19) Pandemic. Int. J. Psychol. 2022, 57, 20–32. [CrossRef] [PubMed]
- 39. Stephens, K.K.; Jahn, J.L.S.; Fox, S.; Charoensap-Kelly, P.; Mitra, R.; Sutton, J.; Waters, E.D.; Xie, B.; Meisenbach, R.J. Collective Sensemaking around Covid-19: Experiences, Concerns, and Agendas for Our Rapidly Changing Organizational Lives. *Manag. Commun. Q.* 2020, 34, 426–457. [CrossRef]
- 40. Qian, Y.; Hu, Y. Couples' Changing Work Patterns in the United Kingdom and the United States during the COVID-19 Pandemic. *Gend. Work Organ.* **2021**, *28*, 535–553. [CrossRef]
- 41. Pinnington, A.H.; Ayoko, O.B. Managing Physical and Virtual Work Environments during the COVID-19 Pandemic: Improving Employee Well-Being and Achieving Mutual Gains. *J. Manag. Organ.* **2021**, *27*, 993–1002. [CrossRef]
- 42. Rathnaweera, D.; Jayathilaka, R. In Employees' Favour or Not?—The Impact of Virtual Office Platform on the Work-Life Balances. *PLoS ONE* **2021**, *16*, 0260220. [CrossRef] [PubMed]
- 43. Hassankhani, M.; Alidadi, M.; Sharifi, A.; Azhdari, A. Smart City and Crisis Management: Lessons for the COVID-19 Pandemic. *Int. J. Environ. Res. Public Health* **2021**, *18*, 7736. [CrossRef] [PubMed]
- 44. Worth, N.; Karaagac, E.A. Accounting for Absences and Ambiguities in the Freelancing Labour Relation. *Tijdschr. Voor Econ. En Soc. Geogr.* **2022**, *113*, 96–108. [CrossRef]
- 45. Uysal, N.; Aksak, E.O. "Waging War" for Doing Good? The Fortune Global 500's Framing of Corporate Responses to COVID-19 Pandemic. Sustainability 2022, 14, 3012. [CrossRef]
- 46. Gómez-Salgado, J.; Domínguez-Salas, S.; Romero-Martín, M.; Ortega-Moreno, M.; García-Iglesias, J.J.; Ruiz-Frutos, C. Sense of Coherence and Psychological Distress Among Healthcare Workers During the COVID-19 Pandemic in Spain. *Sustainability* **2020**, 12, 6855. [CrossRef]
- 47. Lange, M.; Kayser, I. The Role of Self-Efficacy, Work-Related Autonomy and Work-Family Conflict on Employee's Stress Level during Home-Based Remote Work in Germany. *Int. J. Environ. Res. Public Health* **2022**, *19*, 4955. [CrossRef] [PubMed]
- 48. Prager, F.; Rhoads, M.; Martinez, J.N. The COVID-19 Economic Shutdown and the Future of Flexible Workplace Practices in the South Bay Region of Los Angeles County. *Transp. Policy* **2022**, *125*, 241–255. [CrossRef] [PubMed]
- 49. Valuenzuela-Garcia, H.; Lubbers, M.J.; Molina, J.L. "She's Surrounded by Loved Ones, but Feeling Alone": A Relational Approach to Loneliness. *Soc. Incl.* **2021**, *9*, 350–362. [CrossRef]
- 50. Rudolph, C.W.; Allan, B.; Clark, M.; Hertel, G.; Hirschi, A.; Kunze, F.; Shockley, K.; Shoss, M.; Sonnentag, S.; Zacher, H. Pandemics: Implications for Research and Practice in Industrial and Organizational Psychology. *Ind. Organ. Psychol.* **2020**, *14*, 1–35. [CrossRef]
- 51. Newman, A.; Eva, N.; Bindl, U.K.; Stoverink, A.C. Organizational and Vocational Behavior in Times of Crisis: A Review of Empirical Work Undertaken during the COVID-19 Pandemic and Introduction to the Special Issue. *Appl. Psychol.* **2022**, 71, 743–764. [CrossRef]

52. Navas-Martín, M.Á.; López-Bueno, J.A.; Oteiza, I.; Cuerdo-Vilches, T. Routines, Time Dedication and Habit Changes in Spanish Homes during the COVID-19 Lockdown. A Large Cross-Sectional Survey. *Int. J. Environ. Res. Public Health* **2021**, *18*, 12176. [CrossRef]

- 53. Soubelet-Fagoaga, I.; Arnoso-Martinez, M.; Elgorriaga-Astondoa, E.; Martínez-Moreno, E. Telework and Face-to-Face Work during COVID-19 Confinement: The Predictive Factors of Work-Related Stress from a Holistic Point of View. *Int. J. Environ. Res. Public Health* 2022, 19, 3837. [CrossRef]
- 54. Rodríguez-Rivero, R.; Yáñez, S.; Fernández-Aller, C.; Carrasco-Gallego, R. Is It Time for a Revolution in Work-Life Balance? Reflections from Spain. *Sustainability* **2020**, *12*, 9563. [CrossRef]
- 55. Donoso, G.R.; Valderrama, C.G.; LaBrenz, C.A. Academic and Family Disruptions during the COVID-19 Pandemic: A Reflexive from Social Work. *Qual. Soc. Work* **2021**, 20, 587–594. [CrossRef] [PubMed]
- 56. Otonkorpi-Lehtoranta, K.; Salin, M.; Hakovirta, M.; Kaittila, A. Gendering Boundary Work: Experiences of Work-Famly Practices among Finnish Working Parents during COVID-19 Lockdown. *Gend. Work Organ.* **2021**, 29, 1952–1968. [CrossRef] [PubMed]
- 57. Antonacopoulou, E.P.; Georgiadou, A. Leading through Social Distancing: The Future of Work, Corporations and Leadership from Home. *Gend. Work Organ.* **2021**, *28*, 749–767. [CrossRef]