

Article

COVID-19 and the New Normal of Organizations and Employees: An Overview

Aarthi Raghavan ^{1,*}, Mehmet Akif Demircioglu ¹ and Serik Orazgaliyev ²

¹ Lee Kuan Yew School of Public Policy, National University of Singapore, Singapore 259772, Singapore; mehmet@nus.edu.sg

² Graduate School of Public Policy, Nazarbayev University, Nur-Sultan 010000, Kazakhstan; serik.ozazgaliyev@nu.edu.kz

* Correspondence: aarthir@u.nus.edu; Tel.: +91-9360761715

Abstract: The COVID-19 pandemic has hit organizations and employees in every sector worldwide in unprecedented ways. It became extremely difficult for organizations and employees across sectors to operate under increased mobility restrictions. The pandemic effectively disrupted previous operational models and imbued changes such as telework and digital adoption that are pervasive and may potentially last beyond the pandemic. Amid these circumstances, it was essential to ask how organizations and employees will sustain themselves in the post-COVID-19 “new normal”. Although so much research is conducted about COVID-19, there is no comprehensive view of the changes at the meso (organizational) and micro (individual) levels. This article aims to explain this using the emergency-learning-institutionalization-new normal (ELIN) framework, which is based on the timeline of the pandemic. The article aims to bring forth the overall trends in how organizations and employees are adapting to the pandemic, the lessons they have learned, and how they will change and adapt in a post-COVID-19 “new normal”. We have analyzed existing policy papers, articles published in business, public administration, nonprofit journals, and other studies to achieve this. We find an increasing trend towards the adoption of telework and digital tools at both meso- and micro-levels. The effective implementation of telework policies and digital transformation plans at the meso-level will ensure the sustainability of organizations and jobs in the new normal. Although these trends vary across sectors and within and across countries, there is an overall increase in the flexibility of organizations and employees in adopting new solutions, making them more open to innovation. The article makes important recommendations for organizations to make these transitions more sustainable in the medium and long term.

Keywords: COVID-19; pandemic; organizations; new normal; public sector; private sector



Citation: Raghavan, A.; Demircioglu, M.A.; Orazgaliyev, S. COVID-19 and the New Normal of Organizations and Employees: An Overview. *Sustainability* **2021**, *13*, 11942. <https://doi.org/10.3390/su132111942>

Academic Editors: Antonio M. López Hernandez and Søren Askegaard

Received: 31 July 2021

Accepted: 18 October 2021

Published: 28 October 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The COVID-19 (or Coronavirus Disease 2019) pandemic is one of the most unprecedented health crises of the 21st century. The disease, which originated in the city of Wuhan (China) in December 2019 [1], turned out to be a VUCA (volatility, uncertainty, complexity, and ambiguity) event which shocked and distressed every segment of human civilization [2]. As of July 2021, it has infected more than 233 million people and killed more than 4.7 million people [3]. Governments worldwide implemented strict lockdowns, contact tracing measures, and digitization to save lives while ensuring continuity of essential services [2]. The intensity and duration of mobility restrictions significantly impacted on organizations and employees across sectors [4,5].

The continuity of services during COVID-19 became challenging across the public sector [6–8], private sector [9–13], and non-profit sector [14–16]. Even basic services such as healthcare [17], education [18], public administration [8], food delivery [19], and community services [14] were affected. To overcome challenges, organizations had to reconfigure

their resources, systems, and manpower (employees) [4,5]. Employees were faced with unexpected changes to their work environment, and many had to adjust themselves to remote work structures [4,5] and adopt digital solutions to ensure service continuity [14,17,20], whereas others in sectors such as manufacturing were forced to continue work on the field [21]. Many employees faced pay cuts, and some even lost their jobs during the crisis [5]. However, on a positive note, the pandemic allowed organizations to develop resilience, as they responded, recovered, and tried to recreate themselves after the pandemic [13,22]. The duration, intensity, and implications of the COVID-19 pandemic offer a significant opportunity for organizations and employees to imbibe change [6,7,16,20,22]. Motivated by these ideas and developments, the article aims to answer the following research question: How has the COVID-19 pandemic affected organizations and employees across different sectors? Thus, the unit of analysis in this research is organizations and individuals (employees).

Organizations and employees evolved in their responses to the crisis throughout the lifecycle of the pandemic. Based on this idea, we introduce the emergency-learning-institutionalization-new normal (ELIN) framework, which helps explain this transition. Unlike some studies that look at sustainable transition as a cycle of change [21,23], the ELIN framework describes the pandemic as a disruption that elevates the response of organizations and employees to a new level—i.e., a post-COVID-19 “new normal” (see Figure 1). We propose that the principles of organizational sustainability will change significantly in the pre-and post-COVID-19 situations since COVID-19 was a major disruption for organizations and employees. Despite growing research on this topic [4,13,22,24], there is a need for a more comprehensive understanding of the changes organizations and employees have undergone during the pandemic.



Figure 1. The emergency-learning-institutionalization-new normal (ELIN) framework for discussing the impact of COVID-19 on service delivery.

The rest of this article is organized as follows. The following section will define and discuss the “new normal” and present the framework used in this article. After this, the impact of the pandemic on the meso- and micro-levels is discussed in detail (Sections 3 and 4). In the discussion section, we summarize our findings, discuss implications for future research, make recommendations, and end the article with a conclusion.

2. New Normal and Conceptual Framework

From the context of this paper, the new normal can be defined as a situation where the nature/behavior of organizations/employees has changed in response to the new health, social, and economic realities in a post-COVID-19 world. The new normal also signifies fundamental shifts in operations and behavior of organizations and employees, respectively, due to the sustained nature of the COVID-19 pandemic, which has lasted for more than a year. The new normal is also a transitional phase where changes will be implemented and perceived at varying paces, scale, and intensity across organizations, sectors, and countries. It indicates a significant change in the existing model but does not limit the extent of change that can be achieved. This means the new normal, is an ideal opportunity to undertake and push for pathbreaking changes, or innovations, at the operational, structural, and behavioral levels. While challenging, such changes can embed more resilience into organizations and engender flexible attitudes and adaptive behavior at the meso- and micro-levels.

To identify changes that may outlast the pandemic and continue to be a part of service delivery in the new normal, the article uses the term “institutionalization”. Institutionalized changes are the ones that have been adopted by organizations and/or employees based on

their experience of the crisis and will continue to be a part of the system and thus becomes a new normal. Such changes allow organizations to build resilience to similar events in the future [25]. This approach adds to the growing literature on the long-term impacts of VUCA events on the structures and personnel employed across sectors [2,26].

The above figure represents the emergency-learning-institutionalization-new normal (ELIN) framework. The emergency phase represents the knee-jerk reaction of organizations to the pandemic and the nationwide lockdowns imposed by governments. Many of the organizations that implemented telework during this time experienced significant disruptions to their operational model. Most sectors were reacting to this phase through their existing structures and processes. In the private sector, this led to firms not being able to bear the operating costs and employee salaries, which resulted in layoffs and temporary or permanent closures [27].

Organizations that survived the response phase entered the learning phase, where they started “to reimagine their business models, daily operations, and communication channels” [28] (p. 1). This is the phase where organizations started adopting technology-based solutions and promoted responsible behavior through “cashless payments, click and collect practices, a physical distancing between customer and employee, improved sanitation practices”, and other methods which varied from one context to the other [29] (p. 7). This phase marks a proactive approach by organizations to ensure the safety of their employees, customers, and common citizens by experimenting with new ideas and solutions. Examples include the increased adoption of telemedicine and digital solutions in the healthcare sector [30], new citizen-led community engagement initiatives by governments [31], and enhanced mobile ordering systems observed in the food delivery businesses around the world [29]. Interestingly, solutions that are effective against the pandemic were adopted more widely by organizations (see Figure 2), indicating a trend of adaptive innovation across organizations [32–37]. In turn, these helped organizations to bring about changes that will shape their operations in the new normal.

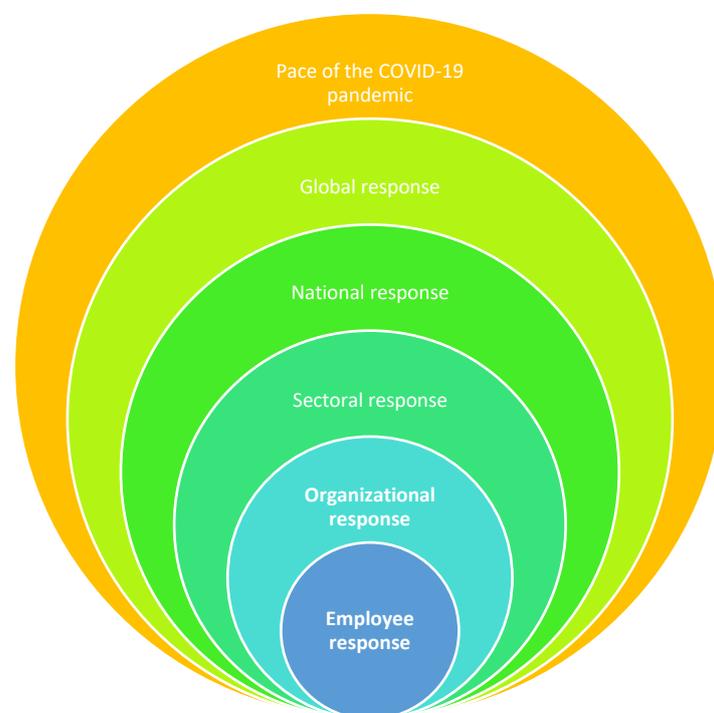


Figure 2. Factors affecting responses to COVID-19 across sectors.

From a broader perspective (as observed in Figure 2), the pace of the pandemic was the key determinant of how organizations and employees responded to the pandemic, followed by global, national, and sectoral responses. From a system thinking perspective,

the learning or adaptation of different sectors can be explained by the response effectiveness across each of these layers, as shown in Figure 2. Although the article's main focus is the employee and organizational response (micro- and meso-levels), the other responses also affect employee and organizational response. Each layer had multiple entities trying to control the pace of the pandemic. While successful responses were imbibed into the system as best practices, failures forced organizations to adopt new solutions or replicate effective solutions implemented by others as part of the learning phase [25,38]. Survival pushed many organizations and employees to change ingrained processes and attitudes and adopt innovations and behavior patterns [39–41].

In the institutionalization phase, the lessons learned in the learning phase became more embedded. The adoption of new organizational policies and operational models indicated a fundamental shift from the pre-COVID-19 era. The public sector, in particular, saw incredible transformations such as the emergence of e-courts, where court hearings were shifted to virtual platforms, thus saving immense resources [42]. While some organizations and employees adapted changes to become more resilient to potential future crises [43,44], others future-proofed their models to all kinds of crises by transforming themselves into agile and innovative institutions [45]. This was especially true for organizations in the healthcare sector that have undergone a fundamental shift in thought process from “this is what we have always done” to “this is what we are going to try.” Institutionalization is strongly observed in sectors that were most affected by the pandemic [46] and hence may have significant differences across countries, sectors, and organizations.

2.1. Sustainability of Changes in the New Normal

Learning and institutionalization comprise the changes in organizations, which can continue to evolve perpetually in the new normal. Interestingly, the new normal can be perceived as a situation where organizations may start to own and lead the change continuously, even after the threat of the pandemic begins to subside to some extent. It is here when changes learnt and institutionalized by organizations in the above phases can become more sustainable. However, there are challenges where each organization and its different departments will have their own pace of adaptability and proactiveness to the changes ensued by the pandemic. Moreover, in some situations, they may not be able to adopt all changes, although technology adoption being highly disruptive may be an irreversible change for many organizations [46].

The pandemic has also enhanced the intra- and inter-organizational learning sphere through enhanced collaboration and co-production activities observed across sectors. This created a dynamic and multidimensional learning sphere where new solutions and innovations were adopted to survive against a common threat, as per contextual needs and realities [38]. During the pandemic, most organizations have tried to learn from each other and adopt best practices. If continued, the process can make organizations and employees more resilient and help create sustainable working models and solutions in the long run [47].

Since the pandemic broke out, one of the key characteristics of the new normal for organizations and employees is telework and digital adoption, which are the cross-sectoral changes that emerged in response to COVID-19. According to sources, telework is a work arrangement that allows an employee to perform work, during any part of regular, paid hours, at an approved alternative worksite (e.g., home, telework center). It is an essential tool for achieving a resilient and results-oriented workforce. At its core, telework is people doing their work at locations different from where they would generally be doing it. This makes sense when someone considers that “tele” comes from the Greek word meaning “from a distance”—when combined with work, it means “work from a distance”. In the current context, telework can be undertaken using the Internet, email, messaging, telephones/mobile phones, and other fast communication channels [48]. On the other hand, digital adoption occurs when an organization invests in new technology, adopts a digital mindset, and evolves processes so users can maximize proficiency on a given

software or app [49]. The adoption of digital self-help menus, customer communication, and cross-team meetings are good examples. The following sections (Sections 3 and 4) discuss how the adoption of telework and digital adoption has affected organizations (meso) and employees (micro) across sectors.

3. Meso-Level Changes

Crisis events can lead to learning and change at an organizational level [50]. It is also true that organizations do not always learn from a crisis [51] and do not prepare for it [52]. However, the failure of an organization to learn from a catastrophic event such as COVID-19 can have immense social, political, financial, and individual costs within and beyond itself [53]. In events such as the COVID-19 pandemic, organizations face the fundamental challenge of protecting their employees, their most important resource [54]. This led many organizations to adopt people-centric approaches, embed greater flexibility in processes, digitize operations, increase collaboration, and integrate nimbleness while responding to uncertain situations [55].

3.1. Telework

Before COVID-19, organizations were hesitant to adopt telework due to uncertainty regarding its benefits [56–58]. The factors that hindered adoption earlier were lack of preparedness and technological limitations [59]. Telework also alters the employment and psychological contract between organizations and their employees [60]. As a result, they were cautioned that it could impact employee effectiveness [61]. However, it was not completely opposed, as some studies also highlighted the potential benefits of telework [62–64] and observed that telework can have positive organizational outcomes such as improved productivity, retention, turnover intent, commitment, and performance.

During COVID-19, telework quickly enabled organizations to protect their employees from infections [56,65,66]. Since it was a different model, many organizations struggled in the beginning [44,65]. While some organizations were proactive, others were emulating and reaching out to their peers to support their transition [55]. Within a few months, many were able to implement procedures to improve telework adoption [56,60], even in developing countries [54].

Interestingly, those organizations that already had a telework program in place were able to better adapt to the new working model [54] compared to others who were ill-prepared [51]. In the adoption of telework, although uniformly recognized across countries and sectors, inherent organizational preparedness and resources played a crucial role in actual adaptation [54]. In particular, technology infrastructure played an important role and posed challenges for organizations that did not have enough time to implement it [59]. Cybersecurity became more crucial and was compromised in many cases, which increased the risks associated with cyber-attacks and sensitive data breaches during the pandemic [66]. Some organizations also suffered from inadequate or poor supervision [67]. All this indicates that telework should be approached as an organization's integral long-term strategy, rather than as a response mechanism in times of crisis.

Despite the challenges, the wider adoption of telework enunciated positive changes such as a greater awareness of employee well-being, a more inclusive work environment, and values-based leadership in organizations [56,68]. Many organizations were thus encouraged to develop policies that integrate telework as part of their working model [69]. In many cases, such policies included details of telework training, implementation, and management, making it easier for employees to adopt [57].

Due to wider cross-sectoral adoption, experts observe that telework will generate long term changes in organizations [62,63,70], and the new normal may see organizations adapting hybrid working models with a combination of office work and telework, depending mainly on final outcomes to be achieved, resources available, and risks involved.

3.2. Digital Adoption

Digital adoption is a vital part of organizational transformation, even before the pandemic [71–73]. However, a lack of understanding of the relevance of digital solutions, the absence of digital strategies, a lack of skills, and the perceived cost and risk of change were the key barriers to adoption faced at the meso-level [74]. Interestingly, organizations that adopted digital solutions before COVID-19 were able to adopt digital tools more effectively during the pandemic [71–73], whereas those that were lagging earlier accelerated their efforts as a way of survival [45]. Despite this, digital adoption remained uneven across organizations (within and across countries) owing to resource constraints [75] and a lack of crisis preparedness [76].

Going forward, experts suggest that the pandemic would accelerate digital transformation across organizations [77], although it may not be uniform across organizations since many adopted digital tools for the sake of operational continuity rather than to enable innovation and resilience [78]. Experts suggest that the nature and capacity of organizations can be vital in enabling digital transformation [79]. Efforts to upgrade technological infrastructure at an organizational level and the deployment of adequate technological support for employees can be key factors in enabling wider adoption [80]. However, since such capacity does not evenly exist across organizations, there are bound to be differences in the pace and extent of digital adoption at the meso-level.

Cybersecurity is another primary concern for organizations that aim to digitize their operations further. The lack of well-planned and well-resourced telework programs have exposed organizations to cyber threats during the pandemic, which is expected to increase in the future [81]. Research, however, suggests that cross-sectoral collaboration can help organizations overcome their capacity and skills gaps [82,83]. The private sector has been particularly active in developing new and exciting use-cases of advanced technologies, including cybersecurity.

For sustainable digital adoption, organizations need to address the growing digital divide within and across sectors. The deployment of adequate technological infrastructure and resource support will be key in enabling wider adoption of digital tools as part of work in the new normal [24,84]. Going forward, the role of cybersecurity as “an essential sustainable economic development factor” will continue to evolve and affect how organizations adopt and absorb digital solutions as part of their processes [81] (p. 4).

4. Micro-Level Changes

The sudden transition of the working model has had a significant impact on employee attitudes and behavior [85]. Employees had to work under limited resources, especially in a situation where established rules, routines, or peer expectations had been disrupted and, in some cases, suspended [85]. Research suggests that 93 percent of all employees adopted telework during the pandemic, driven especially by the public sector and services segment across countries [86].

4.1. Telework

Even before the pandemic, telework was beneficial since it provided greater freedom and autonomy, flexible hours, avoided commuting, increased productivity, provided proximity to the family, and improved the quality of work [63,87]. However, adoption was not widespread at the time due to resistance from employees at the managerial levels. Some of the factors highlighted by them included trust issues [87], productivity losses, underperformance [88], inadequate technology [89], and the need for compliance with existing policies [90]. According to a report by Eurofound and ILO (2017) [88], around 2 to 40 percent of employees had some form of exposure to telework before COVID-19, depending on the country, occupation, sector, and frequency. However, the pandemic created a dire situation where employees were forced by organizations to adopt telework, and to some extent, this improved their perception of the model [59]. However, inherent challenges to this transition remained in the form of reluctance to changing working models

and lower incentives to those who adopt [80]. In addition, the model was not equally received across different segments of employees, and there were age and gender-related differences that were observed [87].

It is widely recognized that organizational policies and managerial support have increased the adoption of telework among employees significantly during the pandemic [24,51,54]. However, since adoption was not a choice for employees and they did not have enough time to prepare for the transition, many employees were faced with “computer (and other IT) problems, work-home conflict, unfavorable work conditions, and role conflict” as a result (p. 9, [85]) [86]. Moreover, telework was not an option for all job types. It was more common among high-skilled groups such as professionals and managers and was not feasible for low-skilled groups such as machinery operators, drivers, and laborers [59].

According to the Global Work From Home Experience Survey Report, 68 percent of employees have indicated success in teleworking. As observed in employee surveys, the benefits of telework commonly include better quality of life, work–family balance, greater autonomy, and reductions in costs, stress, and commuting time [90,91]. An empirical analysis of the between-person and within-person effects of telework indicates that telework leads to lower stress, lower work-to-home conflict, higher work engagement, and higher job performance among employees on teleworking days compared to non-teleworking days [24,92].

However, a key challenge for telework adoption among employees is the continuing collective preference for office-based work. Research also indicates that long durations of telework can harm relationships with coworkers and affect the affinity of employees with their organization [87]. Observed mainly in the public sector, this can be a barrier to the widespread adoption of telework [93]. Other challenges include “the lack of resources related to support infrastructures, such as the internet or a printer, and the reconciliation of teleworking with family life/household chores/dedication to children and time/schedule management” [94] (p. 1). The increased frequency and intensity of telework has been associated with blurring of lines between family and work for employees [87] and can have an impact on the well-being of employees and their work performance [24,87].

Despite this, given the fact that telework has served an essential role during the pandemic to keep employees safe, organizations can consider enablers such as quality communication with the team, greater autonomy, and managerial support [95]. The eventual integration of telework in organizations would require the better management of teleworking employees [24,96–99]. This can be in the form of establishing telework policies that can enable employees to show greater acceptance of the model [86,100]. Telework policies also tend to increase employees’ awareness of its benefits and encourage them to learn new skills [67]. Organizational and individual support for teleworking employees, embedded as part of these policies, can help increase job satisfaction and reduce psychological strain caused by social isolation [99,101].

Over the long term, telework adoption at the micro-level depends on “the extent that the crisis catalyzes wider and smarter adoption of efficient telework practices, raising worker well-being” [102] (p. 3). As per the Global Work-from-Home Experience Survey, telework adoption was 31 percent before the pandemic, 88 percent during the pandemic, and has been forecasted to touch 76 percent after the pandemic [95]. In short, while resistance to telework has gradually decreased in the learning phase [103], challenges to the institutionalization of telework at the micro-level remain [104]. Interestingly, for developing countries, the benefits of telework may be greater since it can alleviate traffic congestions and provide environment-related benefits to employees, which can lead to greater adoption of the model in the long run [105]. Hence, going forward, the sustainability of telework adoption will depend on organizations’ (or meso-level) adoption of robust management and telework policies [89,106].

4.2. Digital Adoption

Before COVID-19, digital adoption was favored but not well-managed across all countries, sectors, and organizations [107,108]. Employees, too, found adoption challenging in the initial years due to privacy concerns and the mental pressure it exerted on them [109]. Performance expectancy, effort expectancy, social influence, and facilitating conditions [110] in addition to security, trust [111], and personal innovativeness [112] were found to be the key factors influencing the adoption of digital solutions at the micro-level. The extent of individual adoption has also been found to depend on employee characteristics such as their age, education, gender, income, self-efficacy, and other demographic and psychological variables [110]. Lastly, the nature of technology in terms of its observability, compatibility, job relevance, internal environment, and external environment were also significant predictors of whether employees would adopt digital solutions [113].

During the COVID-19 pandemic, digital solutions became increasingly compatible and relevant to employees' work across sectors. The internal environment of organizations, influenced by the pandemic and the global and national policy environment, became conducive for pushing digital adoption at all levels of the economy, across countries (see Figure 2). Decisions at the meso-level played a vital role in making digital adoption mandatory for employees at the micro-level [56]. While those who were skilled in basic digital applications were able to transition quickly and efficiently, many found it challenging owing to a lack of preparedness and the pace of adoption expected from them. Adoption was especially hard for employees who were not digitally literate [67]. In developing countries, digital adoption was higher among employees at higher levels of organizations compared to lower levels [56]. Specific tools such as social media [114,115] and video conferencing [75,116,117] was perceived to be beneficial, and employees were expected to use them for collaboration and decision-making processes

According to Lebopo, C. M., Seymour, L. F., & Knoesen, H. (2020) [58], factors such as top management support, computer experience, perceived usefulness, behavioral intention, and user support were enablers of digital adoption at the micro-level. Digital tools improved communication, reduced complexity, and increased productivity of employees during the pandemic [118]. However, it also led to an increase in disparities among employees across and within organizations in terms of access and capacity to use digital tools. The digital divide among employees will be more of a challenge for organizations in developing countries compared to those in developed countries. A lack of adequate training and resources will be a key problem for organizations that are financially weak and are faced with developmental and contextual barriers [119,120]. Another key implication of the digital divide is the lack of capacity to avert cyber threats, which will be further exacerbated by the lack of technical capacity, the failure to meet minimum safety standards, poorly configured home ICT devices, a lack of education, and gaps in employee digital literacy [81].

Interestingly, the pandemic has led to a significant improvement in the perception of digital technologies across sectors [121]. Employees have become more accepting of advanced technologies such as artificial intelligence [122], which in turn may potentially fuel more curiosity and motivation to learn them. Basic cyber safety measures can mitigate cyber threats and risks posed by attempts towards data theft. Going forward, it is expected that organizations will not only prioritize digital skill development among employees but also engage in greater partnership with leading technology firms to implement it effectively [123]. Private sector expertise, especially in terms of cybersecurity, if provided to employees, can lead to increased trust in digital systems and a broader adoption of digital solutions.

5. Discussion

5.1. Summary

The article finds that the COVID-19 pandemic has accelerated telework and digital adoption across sectors and contexts at the meso- and micro-levels. We observe that

telework adoption at the meso-level has been widespread and is perceived positively for long-term adoption. However, at the micro-level, telework adoption remains challenging and dependent on meso-level policies and support. In the case of digital adoption, the growing threat of cybersecurity at the meso-level and the digital divide at the micro-level can threaten future goals for digital transformation. Overall, the impact of COVID-19 on organizations with respect to telework and digital adoption is straightforward to explain. On the other hand, the pandemic's impact on the micro-level is complicated by the diversity of factors involved.

Table 1 indicates positive, negative, and uncertain trends observed across sectors at the meso- and micro-levels. The key takeaways from the table are as follows:

1. Implementation of telework policies at the meso-level has a direct or significant impact on adoption of the model at the micro-level;
2. Increase in digital divide at the meso-level is magnifying the skill gaps at the micro-level which call for digital skill development programs;
3. Acceptance of telework and digital adoption has increased significantly at the meso as well as the micro-level;
4. Social isolation resulting from telework can drive organizations to adopt hybrid working models;
5. Cyber threats can undermine trust in digital solutions and its benefits.

Table 1. Trends at the meso- and micro-levels that are likely to continue in the new normal.

	Telework	Digital Adoption
Meso	Increased attention to employee well-being as a policy (+) Implementation of telework policies (+) Adoption of hybrid working models (+)	Acceleration of digital transformation (+) Increase in digital divide (−) Rise in cyberthreats (−)
Micro	Decreased resistance to telework (+) Social isolation (−) Success depends on meso-level policies (?)	Greater acceptance of digital solutions (+) Managerial support increased adoption (+) Urgent need for digital skill development (−)

(+) positive change, (−) negative change, (?) uncertain.

5.2. Implications

The pandemic has pushed many organizations to achieve more within short timelines. As a result, the innovation, productivity, and sustainability of organizations has increased in the learning phase of the pandemic, despite severe resource constraints and pressure [6,124]. Even at the local level, organizations have become more agile and adaptive, leading to the improved efficiency of operations [55]. Many public organizations collaborated actively and spontaneously with community-based organizations [125] and the private sector [126] for effective responses to the pandemic. Increased collaboration with different stakeholders has allowed organizations to overcome their lack of resources and widen their skill base [126]. Thus, a crucial contribution of this study is to understand and analyze the impact of COVID-19 on organizations and employees across public, private, and non-profit sectors. By bringing together meso- and micro-levels, the article aims to bring forth the more pervasive long-term changes across sectors. This approach also helps the article to overcome the lack of 'level diversity', generally observed in administration studies, which is known to limit research to just one level while overlooking the others [127,128].

This approach is essential since an issue at one level can generate effects at other levels [128–130]. For example, while national culture affects employees' behavior [131–133], public, private, and non-profit organizations can also affect regional and national policies of governments and societies [133–135]. Therefore, including the different levels of analysis is crucial to understanding how employees (micro-level) and organizations (meso-level) have been affected by the COVID-19 pandemic.

While collaborations enabled organizations to overcome resource constraints, in many cases they did not help in terms of financial constraints. This has severely challenged

organizations in terms of operational and service continuity [78]. Many organizations in the private sector have resorted to job cuts and permanent office closures in poorly resourced locations. Issues that were not addressed in the learning phase may potentially continue to affect organizations in the institutionalization phase and the new normal. Experts have found that the financial uncertainty of organizations is a result of sustained low investments in productivity since before the crisis [136]. Interestingly, telework and digital adoption can have an impact on the long-term sustainability of organizations [137] by reducing costs and enhancing productivity of organizations and employees.

Drawing from Table 1, we can expect positive changes to improve operations at the meso-level and change behavior at the micro-level, thus making them sustainable in the long run. Some overarching themes that can be identified include the following:

- Reduction in the gap between organizational policies and employee well-being:
 - With telework becoming an integral part of organizational policies, it is expected to see less employee resistance to it;
 - Organizations maybe more willing to adopt hybrid working models, to overcome negative micro-level effects like social isolation;
- Acceleration of digital adoption at meso- and micro-levels:
 - Organizational thrust for digital transformation;
 - Active managerial support for employees to adopt digital solutions as part of work;
 - Greater awareness and acceptance of digital solutions by employees.

As highlighted earlier in Section 2.1, technology adoption will be irreversible, even in the new normal. Since it is an emerging phenomenon, technology is expected to evolve and reduce negative impacts such as cyber threats and digital divides in the longer run. Moreover, the perceived benefits of digital solutions being higher than their negative effects, organizations, and employees can be expected to see sustained adoption and change going forward.

In this article, the attempt of taking stock of COVID-19-related research was made with a particular focus on learning and the institutionalization of telework and digital adoption among organizations and employees. Although the challenges related to telework and digital adoption may be different in different sectors, especially with respect to security and privacy [88], most organizations have implemented some type of response to the situation. Future studies may explore the adoption rate of telework and digitalization across different sectors while collecting new datasets because organizations are heterogenous, even within the same sector [138–140]. Similarly, organizations in the non-profit sector operate differently from specialist public organizations such as the treasury and the central bank. Therefore, future research may focus on a particular sector to analyze how COVID-19 has affected the work process within a specific type of agency.

Future research may also look at national (macro-level) differences [141–145]. Although extant research and existing secondary data could shed light on the emerging trends and implications for organizations, generalized conclusions should be considered carefully. Not only because it could be too early to make general implications at this point but also because the impact of the pandemic varies significantly across countries. This is particularly the case when comparing developed and developing countries since previous research highlights considerable divergence in state capacity and state capabilities [146,147].

Earlier research questioned whether working from home will remain a “normality” for employees in the future [89]. While governments will learn to tackle the spread of the virus with vaccine developments and other measures, it remains unclear how organizations and employees will react to the “new normal”. In general, the adoption of telework and digital tools will become more pervasive in the coming years—a unique effect of the pandemic.

Previous research also suggests that working from home during COVID-19 has negatively affected the motivation of employees [148]. Job satisfaction and general work performance, as highly correlated variables [149–151], present considerably serious challenges for

managers who attempt to retain standards despite changing circumstances. Managers in organizations also face challenges associated with monitoring, communicating effectively, and forming positive organizational cultures. The effects of all these factors related to motivation, satisfaction, and well-being are yet to be studied. Recent studies on the pandemic have analyzed how COVID-19 and related policies have been affecting individual attitudes, well-being, and behavior in different organizations and countries [152–157]. Thus, future studies may analyze how COVID-19 is affecting employee attitudes, well-being, and behavior in different organizational settings in different countries.

Communication is another front to consider since it is of paramount importance in times of the pandemic. To begin with, timely communication proved to be as important as timely decision making, particularly when dealing with the rapid spread of the virus. Such communication could also prevent the spread of false information and panic behavior among citizens. Instances such as the panic buying of food provisions in excessive volumes by the population caused a shortage of food supplies in many countries. The ability of organizations to adapt and deliver its message through effective communication strategies is an area that needs to be revisited considering the vast number of case studies that resulted due to the pandemic.

Research on employee motivation is one of the more popular areas of administration studies [145,158–162] and business research [163–167]. However, with changing working conditions, particularly in the pandemic era, there is a need for more studies and increased attention towards employee well-being [6,102]. Hence, the implementation of telework and digital adoption should go together with improved mechanisms of monitoring, employee well-being, and job satisfaction. In what follows, we complement our findings with structured recommendations to help organizations implement telework and digital adoption for the long term.

5.3. Recommendations

1. Improve remote work infrastructure for employees.

Organizations should create the necessary infrastructure for employees to adopt telework [88] and potentially hybrid working models in the future. They should prioritize the psychological well-being of employees through adequate social support [168]. This will reduce the psychological strain caused due to social isolation, which many teleworkers faced during the COVID-19 pandemic [99]. Organizations should also consider innovative solutions to help employees overcome their resistance to telework [169–171], since it will enable them to implement more flexible working models in the future [24,172].

2. Use digital tools to improve communication and workflow within organizations.

Organizations should use digital tools to enhance employee engagement, job satisfaction, and motivation. Sector-specific digital social networks can also be used to facilitate interactions among employees based on common interests and provide a strong basis for collaboration and learning [173]. Organizations can experiment with digital communities that can learn and grow actively while overcoming the negative impact of teleworking structures.

3. Deploy additional resources at the organizational level for digital transformation.

Organizations need to update their information and communication technology (ICT) resources and talent for enhanced digital adoption. Through a systematic approach to digital adoption, organizations can achieve significant productivity gains, as observed during the pandemic [82,174]. Organizations should leverage innovative digital transformation tools developed by the private sector, including digital accounting tools, project management software, and various collaboration and communication platforms. To accelerate digital transformation, organizations should pay special attention to the evolving landscape of cyber threats. They should try to adopt and embed cybersecurity tools and services as part of digital processes in order to ensure trust and safety of data and operations at the meso-level.

4. Collaborate with technology firms and academic institutions to enhance the digital skills of employees and overcome the digital divide.

Many organizations are aware of the need to upskill employees to enable digital adoption at the micro-level [120] but lack the necessary resources to achieve this [175]. Given that the private technology firms are well-resourced and have rich experience in conducting such programs, organizations should collaborate with them to skill their employees in basic as well as advanced digital tools, including cybersecurity. According to experts, unskilled employees pose a significant threat to an organization's cybersecurity, and hence it should be an integral part of skill development initiatives. Digital skill development in employees is an effective way of overcoming the digital divide within organizations. Organizations can also consider digital open-access resources to help employees bridge their skill gaps faster [176]. Such efforts are likely to enhance employee productivity and make their jobs relevant and sustainable in the long term.

6. Conclusions

This conceptual study analyzes the changes induced by COVID-19 at the meso (organizational) and micro (individual) levels. More specifically, we have aimed to answer the following research question: How has the COVID-19 pandemic affected organizations and employees at the meso- and micro-levels? The changes are classified based on the emergency-learning-institutionalization-new normal (ELIN) framework, which is derived from the timeline of the pandemic and captures its effects across organizations. Telework and digital adoption have been widely adopted by organizations and employees during the pandemic, and going forward, they will increasingly become the norm. However, there are variations in implementation due to a lack of resources and preparedness among organizations, which can vary across sectors and contexts. In addition, employee-level factors will further drive the variable uptake of telework, and the digital divide will continue to increase among employees within and across sectors and contexts. On the positive side, the pandemic may lead to sustainable policies promoting telework and digital transformation at the meso-level, and greater awareness and adoption of work-life balance at the micro-level. To adapt to a new normal, organizations will need to implement employee-centric policies and co-produce solutions as they navigate the uncertainties of the pandemic. Employees will be required to constantly upskill themselves and continuously adapt to a changing work environment. While this may result in greater resilience at the meso-level, the impact on the micro-level remains uncertain and will require further exploration.

A limitation of this article is that it does not base its findings on primary data and statistical analysis but instead relies on secondary research. It is a conceptual paper that draws its purpose from the work of Gilson and Goldberg (2015) [177] (p. 127), where they state that "conceptual papers do not have data because their focus is on integration and proposing new relationships among constructs. Thus, the onus is on developing logical and complete arguments for associations rather than testing them empirically." Similar to other conceptual studies, this article does not aim to make methodological contributions, let alone using it [177,178]. Another limitation of this article would be the lack of systematic review, which future studies can employ (including PRISMA methods) to further explore the topic. Fortunately, several studies have recently used systematic reviews such as bibliometric analysis of management and social science research in general [179–185] and COVID-19 research in particular [186–188]. However, as what we know about the effects of COVID-19 is still limited, and there are growing studies on the effects of COVID-19 on employees, organizations, and countries, future studies may use a systematic review approach such as the PRISMA method to choose a literature search based on a research question in a particular time period. Moreover, since the pandemic is still evolving, there is a possibility of new and interesting changes taking shape at the meso- and micro-levels, which this article may not have captured.

Despite these limitations, the article serves as a useful reference for future research that may be based on primary data collected at the organizational or sectoral level to better

understand the meso- and micro-level impact of the pandemic. Future research can collect data from specific contexts, sectors, and organizations to test the framework presented here. They can also use specific case studies to analyze the impact of telework and digital adoption at the meso- and micro-levels. Furthermore, because this study's focus is at the organizational and employee level, future studies may analyze other responses at the national and global levels to the pace of the COVID-19 pandemic using a comparative or international perspective.

Author Contributions: Conceptualization, A.R., M.A.D. and S.O.; methodology, A.R. and M.A.D.; writing—original draft preparation, A.R., M.A.D. and S.O.; writing—review and editing, A.R., M.A.D. and S.O.; supervision, M.A.D.; project administration, M.A.D.; funding acquisition, M.A.D.; revision: A.R., M.A.D. and S.O. All authors have read and agreed to the published version of the manuscript.

Funding: This research received funding from the Lee Kuan Yew School of Public Policy, National University of Singapore. Grant Number: N-603-105-658-001.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Acknowledgments: The authors are grateful for the support provided by the Lee Kuan Yew School of Public Policy, National University of Singapore, and the Graduate School of Public Policy, Nazarbayev University.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. WHO-Convended Global Study of Origins of SARS-CoV-2: China Part. Available online: <https://www.who.int/publications/i/item/who-convended-global-study-of-origins-of-sars-cov-2-china-part> (accessed on 1 June 2021).
2. Murugan, S.; Rajavel, S.; Aggarwal, A.K.; Singh, A. Volatility, uncertainty, complexity and ambiguity (VUCA) in context of the COVID-19 pandemic: Challenges and way forward. *Int. J. Health Syst. Implement. Res.* **2020**, *4*, 10–16.
3. Worldometer. Available online: <https://www.worldometers.info/coronavirus/> (accessed on 5 June 2021).
4. Kniffin, K.M.; Narayanan, J.; Anseel, F.; Antonakis, J.; Ashford, S.P.; Bakker, A.B.; Bamberger, P.; Bapuji, H.; Bhawe, D.P.; Choi, V.K.; et al. COVID-19 and the workplace: Implications, issues, and insights for future research and action. *Am. Psychol.* **2021**, *76*, 63. [CrossRef]
5. Teleworking during the COVID-19 Pandemic and Beyond: A Practical Guide. Available online: https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/instructionalmaterial/wcms_751232.pdf (accessed on 20 June 2021).
6. Schuster, C.; Weitzman, L.; Sass Mikkelsen, K.; Meyer-Sahling, J.; Bersch, K.; Fukuyama, F.; Paskov, P.; Rogger, D.; Mistree, D.; Kay, K. Responding to COVID-19 Through Surveys of Public Servants. *Public Adm. Rev.* **2020**, *80*, 792–796. [CrossRef]
7. Ansell, C.; Sørensen, E.; Torfing, J. The COVID-19 pandemic as a game changer for public administration and leadership? The need for robust governance responses to turbulent problems. *Public Manag. Rev.* **2020**, *23*, 1–12. [CrossRef]
8. Bekir, K.U.L. Impact of Covid-19 on Work Life: A Study for Public Sector. *Int. J. Soc. Political Econ. Res.* **2021**, *8*, 68–88.
9. Beraha, I.; Đuričin, S. The impact of COVID-19 crisis on medium-sized enterprises in Serbia. *Econ. Anal.* **2020**, *53*, 14–27.
10. Juergensen, J.; Guimón, J.; Narula, R. European SMEs amidst the COVID-19 crisis: Assessing impact and policy responses. *J. Ind. Bus. Econ.* **2020**, *47*, 499–510. [CrossRef]
11. Kumar, S.; Nafi, S.M. Impact of COVID-19 Pandemic on Tourism: Perceptions from Bangladesh. 2020. Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3632798 (accessed on 30 August 2021).
12. Kang, S.E.; Park, C.; Lee, C.K.; Lee, S. The Stress-Induced Impact of COVID-19 on Tourism and Hospitality Workers. *Sustainability* **2021**, *13*, 1327. [CrossRef]
13. John, J.; Thakur, R. Long term effects of service adaptations made under pandemic conditions: The new “post COVID-19” normal. *Eur. J. Mark.* **2021**, *55*, 1679–1700. [CrossRef]
14. Bin-Nashwan, S.A.; Al-Daihani, M. Fundraising campaigns via social media platforms for mitigating the impacts of the COVID-19 epidemic. *J. Islamic Mark.* **2020**, *12*, 576–597. [CrossRef]
15. Johnson, A.F.; Rauhaus, B.M.; Webb-Farley, K. The COVID-19 pandemic: A challenge for US nonprofits' financial stability. *J. Public Budg. Account. Financ. Manag.* **2020**, *33*, 33–46. [CrossRef]
16. Nemțeanu, M.S.; Dabija, D.C. Best practices of nongovernmental organisations in combatting COVID-19. In Proceedings of the 6th BASIQ International Conference on New Trends in Sustainable Business and Consumption, Messina, Italy, 4–6 June 2020; Pamfilie, R., Dinu, V., Tăchiciu, L., Pleșea, D., Vasiliu, C., Eds.; ASE: Bucharest, Romanian, 2020; pp. 626–633.

17. Mann, D.M.; Chen, J.; Chunara, R.; Testa, P.A.; Nov, O. COVID-19 transforms health care through telemedicine: Evidence from the field. *J. Am. Med. Inform. Assoc.* **2020**, *27*, 1132–1135. [CrossRef] [PubMed]
18. Aefsky, F. COVID19 Pandemic Impact on Education in the United States. *Interdiscip. Insights J. St. Leo Univ. Coll. Educ. Soc. Serv.* **2021**, *3*, 3–13.
19. Siche, R. What is the impact of COVID-19 disease on agriculture? *Sci. Agropecu.* **2020**, *11*, 3–6. [CrossRef]
20. Ahmad, A.; Alshurideh, M.T.; Al Kurdi, B.H.; Salloum, S.A. Factors Impacts Organization Digital Transformation and Organization Decision Making During Covid19 Pandemic. *Eff. Coronavirus Dis. (COVID-19) Bus. Intell.* **2021**, *334*, 95.
21. Dar, M.A.; Gladysz, B.; Buczacki, A. Impact of COVID19 on Operational Activities of Manufacturing Organizations—A Case Study and Industry 4.0-Based Survive-Stabilise-Sustainability (3S) Framework. *Energies* **2021**, *14*, 1900. [CrossRef]
22. Rai, S.S.; Rai, S.; Singh, N.K. Organizational resilience and social-economic sustainability: COVID-19 perspective. *Environ. Dev. Sustain.* **2021**, 1–18.
23. There Is No Returning to Normal After COVID-19. But There Is a Path Forward. Available online: <https://www.weforum.org/agenda/2020/04/covid-19-three-horizons-framework/> (accessed on 20 May 2021).
24. Teng-Calleja, M.; Caringal-Go, J.F.; Manaois, J.O.; Isidro, M.; Queenie, Y.; Zantua, R.M.S. Examining organizational response and employee coping behaviors amid the COVID-19 pandemic. *J. Behav. Sci.* **2020**, *15*, 34–50.
25. Chesbrough, H. To recover faster from Covid-19, open up: Managerial implications from an open innovation perspective. *Ind. Mark. Manag.* **2020**, *88*, 410–413. [CrossRef]
26. Moon, M.J. Fighting COVID -19 with Agility, Transparency, and Participation: Wicked Policy Problems and New Governance Challenges. *Public Adm. Rev.* **2020**, *80*, 651–656. [CrossRef]
27. ILO Monitor: COVID-19 and the World Of Work. Available online: https://www.ilo.org/global/topics/coronavirus/impacts-and-responses/WCMS_749399/lang--en/index.htm (accessed on 22 June 2021).
28. Outmaneuver Uncertainty: Navigating the Human and Business Impact of Covid-19. Available online: <https://www.accenture.com/mu-en/about/company/coronavirus-business-economic-impact> (accessed on 23 June 2021).
29. Baum, T.; Mooney, S.K.; Robinson, R.N.; Solnet, D. COVID-19's impact on the hospitality workforce—new crisis or amplification of the norm? *Int. J. Contemp. Hosp. Manag.* **2020**, *32*, 2813–2829. [CrossRef]
30. Khor, W.B.; Yip, L.; Zhao, P.; Foo, V.H.; Lim, L.; Ting, D.S.; Loon, S.C.; Wong, E.; Yong, V.; Tan, C.; et al. Evolving practice patterns in Singapore's public sector ophthalmology centers during the COVID-19 pandemic. *Asia-Pac. J. Ophthalmol.* **2020**, *9*, 285. [CrossRef]
31. Criado, J.I.; Guevara-Gómez, A.; Villodre, J. Using collaborative technologies and social media to engage citizens and governments during the COVID-19 Crisis. The case of Spain. *Digit. Gov. Res. Pract.* **2020**, *1*, 1–7. [CrossRef]
32. Bailey, K.; Breslin, D. The COVID-19 Pandemic: What can we learn from past research in organizations and management? *Int. J. Manag. Rev.* **2021**, *23*, 3–6. [CrossRef]
33. Innovation Facets Part 5: Adaptive Innovation. Available online: <https://www.oecd-opsi.org/innovation-facets-part-5-adaptive-innovation/#:~:text=%20In%20order%20for%20adaptive%20innovation%20to%20occur%2C,out%20new%20ideas%2C%20to%20explore%20different...%20More%20> (accessed on 28 June 2021).
34. de Oliveira Santini, F.; Kretschmer, C.; Marconatto, D.A.B. Antecedents, consequents and moderators of business models in SMEs: A meta-analytical research study. *J. Small Bus. Entrep.* **2021**. [CrossRef]
35. Guo, H.; Wang, C.; Su, Z.; Wang, D. Technology Push or Market Pull? Strategic Orientation in Business Model Design and Digital Start-up Performance. *J. Prod. Innov. Manag.* **2021**, *37*, 352–372. [CrossRef]
36. Rodríguez, R.; Molina-Castillo, F.J.; Svensson, G. The mediating role of organizational complexity between enterprise resource planning and business model innovation. *Ind. Mark. Manag.* **2020**, *84*, 328–341. [CrossRef]
37. To, C.K.M.; Chau, K.P.; Kan, C.W. The logic of innovative value proposition: A schema for characterizing and predicting business model evolution. *J. Bus. Res.* **2020**, *112*, 502–520. [CrossRef]
38. Sampat, B.N.; Shadlen, K.C. The COVID-19 Innovation System: Article discusses innovations that emerged during the COVID-19 pandemic. *Health Aff.* **2021**, *40*, 400–409. [CrossRef] [PubMed]
39. Burns, T.E.; Stalker, G.M. *The Management of Innovation*; Tavistock: London, UK, 1961.
40. Hogan, S.J.; Coote, L.V. Organizational culture, innovation, and performance: A test of Schein's model. *J. Bus. Res.* **2014**, *67*, 1609–1621. [CrossRef]
41. Naidoo, V. Firm survival through a crisis: The influence of market orientation, marketing innovation and business strategy. *Ind. Mark. Manag.* **2010**, *39*, 1311–1320. [CrossRef]
42. Chiodo, S.E. Ontario Civil Justice Reform in the Wake of COVID-19: Inspired or Institutionalized? *Osgoode Hall LJ* **2020**, *57*, 801.
43. There's No Going Back but Be Wary of the 'New Normal'. Available online: <https://www.govexec.com/management/2020/06/theres-no-going-back-be-wary-new-normal/166278/> (accessed on 7 February 2021).
44. Seetharaman, P. Business models shifts: Impact of Covid-19. *Int. J. Inf. Manag.* **2020**, *54*, 102173. [CrossRef]
45. Weiss, P.G.; Li, S.T.T. Leading change to address the needs and well-being of trainees during the COVID-19 pandemic. *Acad. Pediatrics* **2020**, *20*, 735–741. [CrossRef] [PubMed]
46. Schultz, C. Learning is change: Creating an environment for sustainable organizational change in continuing and higher education. *Can. J. Univ. Contin. Educ.* **2014**, *40*, 1–26. [CrossRef]

47. Lozano, R.; Barreiro-Gen, M. Disrupting the brave new world: COVID-19 effects on organisations' sustainability efforts. *J. Organ. Chang. Manag.* **2021**, *34*, 613–628. [CrossRef]
48. What Is Telework? Available online: <https://www.telework.gov/about/> (accessed on 18 August 2021).
49. What is Digital Adoption? A Definition for the Modern Leader. Available online: <https://blog.walkme.com/what-is-digital-adoption/> (accessed on 18 August 2021).
50. Seeger, M.W.; Ulmer, R.R.; Novak, J.M.; Sellnow, T. Post-crisis discourse and organizational change, failure and renewal. *J. Organ. Chang. Manag.* **2005**, *18*, 78–95. [CrossRef]
51. Smith, D.; Elliott, D. Exploring the barriers to learning from crisis: Organizational learning and crisis. *Manag. Learn.* **2007**, *38*, 519–538. [CrossRef]
52. Wang, J. Developing organizational learning capacity in crisis management. *Adv. Dev. Hum. Resour.* **2008**, *10*, 425–445. [CrossRef]
53. Elliott, D. The failure of organizational learning from crisis—a matter of life and death? *J. Contingencies Crisis Manag.* **2009**, *17*, 157–168. [CrossRef]
54. Metwally, A.B.M.; Diab, A.; Mohamed, M.K. Telework operationalization through internal CSR, governmentality and accountability during the Covid-19: Evidence from a developing country. *Int. J. Organ. Anal.* **2021**. [CrossRef]
55. Dzigbede, K.D.; Gehl, S.B.; Willoughby, K. Disaster resiliency of US local governments: Insights to strengthen local response and recovery from the COVID-19 pandemic. *Public Adm. Rev.* **2020**, *80*, 634–643. [CrossRef] [PubMed]
56. Smit, F.P. Home-Based Telework at the Ministry of Foreign Affairs: A Research into The Effect of Imposed Home-Based Telework (HbTW) due to the COVID-19 Crisis on Employee Well-Being and the Moderating Effect of Organisational Support. Master's Thesis, Utrecht University, Utrecht, The Netherlands, 2020.
57. 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]
58. Lebopo, C.M.; Seymour, L.F.; Knoesen, H. Explaining factors affecting telework adoption in South African organisations pre-COVID-19. In Proceedings of the South African Institute of Computer Scientists and Information Technologists, Cape Town, South Africa, 14–16 September 2020; pp. 94–101.
59. Green, N.; Tappin, D.; Bentley, T. Working from home before, during and after the Covid-19 pandemic: Implications for workers and organisations. *N. Z. J. Employ. Relat.* **2020**, *45*, 5–16. [CrossRef]
60. Jaakson, K.; Kallaste, E. Beyond flexibility: Reallocation of responsibilities in the case of telework. *New Technol. Work. Employ.* **2010**, *25*, 196–209. [CrossRef]
61. Eckhardt, G.M.; Houston, M.B.; Jiang, B.; Lamberton, C.; Rindfleisch, A.; Zervas, G. Marketing in the sharing economy. *J. Mark.* **2019**, *83*, 5–27. [CrossRef]
62. Rocha, C.T.M.D.; Amador, F.S. Telework: Conceptualization and questions for analysis. *Ebape Noteb. Br.* **2018**, *16*, 152–162. [CrossRef]
63. Tremblay, D.G. Balancing work and family with telework? Organizational issues and challenges for women and managers. *Women Manag. Rev.* **2002**, *17*, 157–170. [CrossRef]
64. Martin, B.H.; MacDonnell, R. Is telework effective for organizations? A meta-analysis of empirical research on perceptions of telework and organizational outcomes. *Manag. Res. Rev.* **2012**, *35*, 602–616. [CrossRef]
65. Nasri, M.A.; Alamsyah, M.N.; Ramadhan, D.; Fathurrahman, R. Telework During Pandemic: Comparing Readiness between Local and Central Government Employees. In Proceedings of the IAPA Annual Conference, Bali, Indonesia, 11–12 November 2020; pp. 677–701.
66. Powell, C.R. The Impact of Telework on Organizational Cybersecurity during the COVID-19 Pandemic. Ph.D. Thesis, Utica College, New York, NY, USA, 2021.
67. Kim, T.; Mullins, L.B.; Yoon, T. Supervision of Telework: A Key to Organizational Performance. *Am. Rev. Public Adm.* **2021**, *51*, 263–277. [CrossRef]
68. Bartsch, S.; Weber, E.; Büttgen, M.; Huber, A. Leadership matters in crisis-induced digital transformation: How to lead service employees effectively during the COVID-19 pandemic. *J. Serv. Manag.* **2020**, *32*, 71–85. [CrossRef]
69. Williamson, S.; Colley, L.; Hanna-Osborne, S. Will working from home become the 'new normal' in the public sector? *Aust. J. Public Adm.* **2020**, *79*, 601–607. [CrossRef]
70. Novianti, K.R.; Roz, K. Teleworking and Workload Balance on Job Satisfaction: Indonesian Public Sector Workers During Covid-19 Pandemic. *APMBA* **2020**, *9*, 1–10.
71. Andersen, K.N.; Lee, J.; Henriksen, H.Z. Digital sclerosis? Wind of change for government and the employees. *Digit. Gov. Res. Pract.* **2020**, *1*, 1–14. [CrossRef]
72. Kassen, M. *E-Government in Kazakhstan: A Case Study of Multidimensional Phenomena*; Routledge: New York, NY, USA, 2016.
73. Yildiz, M.; Babaoğlu, C.; Demircioglu, M.A. E-Government Education in Turkish Public Administration Graduate Programs: Past, Present, and Future. *J. Public Aff. Educ.* **2016**, *22*, 287–302. [CrossRef]
74. Fan, Q. Factors affecting adoption of digital business: Evidence from Australia. *Glob. J. Bus. Res.* **2016**, *10*, 79–84.
75. Agostino, D.; Arnaboldi, M.; Lema, M.D. New development: COVID-19 as an accelerator of digital transformation in public service delivery. *Public Money Manag.* **2021**, *41*, 69–72. [CrossRef]
76. Nieuwenhuizen, W. How Working Digitally during the Covid-19 Pandemic Does Not Help to Transform the Public Sector: A Digital Organisational Ethnography. Master's Thesis, Utrecht University, Utrecht, The Netherlands, 2020.

77. Young, M.M. Implementation of Digital-Era Governance: The Case of Open Data in US Cities. *Public Adm. Rev.* **2020**, *80*, 305–315. [CrossRef]
78. Maher, C.S.; Hoang, T.; Hindery, A. Fiscal Responses to COVID-19: Evidence from Local Governments and Nonprofits. *Public Adm. Rev.* **2020**, *80*, 644–650. [CrossRef]
79. Bakibinga-Gaswaga, E.; Bakibinga, S.; Bakibinga, D.B.M.; Bakibinga, P. Digital technologies in the COVID-19 responses in sub-Saharan Africa: Policies, problems and promises. *Pan Afr. Med. J.* **2020**, *35*, 38. [CrossRef]
80. Monaco, A.; Palmer, K.; Holm Ravn Faber, N.; Kohler, I.; Silva, M.; Vatland, A.; van Griensven, J.; Votta, M.; Walsh, D.; Clay, V.; et al. Digital Health Tools for Managing Noncommunicable Diseases During and After the COVID-19 Pandemic: Perspectives of Patients and Caregivers. *J. Med. Internet Res.* **2021**, *23*, e25652. [CrossRef]
81. Mihailović, A.; Cerović Smolović, J.; Radević, I.; Rašović, N.; Martinović, N. COVID-19 and Beyond: Employee Perceptions of the Efficiency of Teleworking and Its Cybersecurity Implications. *Sustainability* **2021**, *13*, 6750. [CrossRef]
82. Rana, N.P.; Dwivedi, Y.K.; Hughes, D.L. Analysis of challenges for blockchain adoption within the Indian public sector: An interpretive structural modelling approach. *Inf. Technol. People* **2021**. (ahead of print). [CrossRef]
83. Machmud, M.; Musa, A.E.Z.; Masmuh, A.; Nasirin, C.; Salahudin, S. Government Response and Communication in Covid-19 Crisis Management in Indonesia. *Int. J. Innov. Creat. Chang.* **2020**, *14*, 377–396.
84. Working anytime, Anywhere: The effects on the World of Work. Available online: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_544138.pdf (accessed on 1 July 2021).
85. Dunlop, C.A.; Ongaro, E.; Baker, K. Researching COVID-19: A Research Agenda for Public Policy and Administration Scholars Journal Item. *Public Policy Adm.* **2020**, *35*, 365–383. [CrossRef]
86. Filardi, F.; da Costa Schmitz-thiago, T.; Leal, D.D.C. Teleworking Pre, During, and Post-Pandemic: Organizational Adherence and Professionals Preferences in Times of COVID-19. In *XLIV Encontro Da Anpad—EnANPAD*; National Association of Graduate Studies and Research in Administration (ANPAD): Maringa, Brazil, 2020.
87. Gajendran, R.S.; Harrison, D.A. The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *J. Appl. Psychol.* **2007**, *92*, 1524. [CrossRef]
88. Fraij, J.; Aburumman, N. How Does Telework Act As A Solution To The Public Sector In The Time Of Pandemic? *Netw. Intell. Stud.* **2021**, *17*, 13–24.
89. The Role of Middle Managers in Progressing Gender Equity in the Public Sector. Available online: <https://www.5050foundation.edu.au/assets/reports/documents/Middle-Managers-and-Gender-Equity.pdf> (accessed on 4 March 2021).
90. Hasa, E. Evaluating the impact of COVID-19 on employees' productivity of public administration. In Proceedings of the IAI Academic, Tiranë, Albania, 16 September 2020; p. 33.
91. Abulibdeh, A. Can COVID-19 mitigation measures promote telework practices? *J. Labor Soc.* **2020**, *23*, 551–576. [CrossRef]
92. Delanoëije, J.; Verbruggen, M. Between-person and within-person effects of telework: A quasi-field experiment. *Eur. J. Work Organ. Psychol.* **2020**, *29*, 795–808. [CrossRef]
93. Mele, V.; Bellé, N.; Cucciniello, M. Thanks, but no thanks. Preferences towards teleworking colleagues in public organizations. *J. Public Adm. Res. Theory* **2021**, *31*, 790–805. [CrossRef]
94. Tavares, F.; Santos, E.; Diogo, A.; Ratten, V. Teleworking in Portuguese communities during the COVID-19 pandemic. *J. Enterprising Communities People Places Glob. Econ.* **2020**, *15*, 334–349. [CrossRef]
95. Global Workplace Analytics. 2020. Available online: <https://globalworkplaceanalytics.com/wp-content/uploads/edd/2020/05/Global-Work-from-Home-Experience-Survey-Report-FINAL.pdf> (accessed on 2 July 2021).
96. Filardi, F.; de Castro, R.M.; Zanini, M.T.F. Advantages and disadvantages of teleworking in Brazilian public administration: Analysis of SERPRO and Federal Revenue experiences. *Cad. EBAPE Br.* **2020**, *18*, 28–46. [CrossRef]
97. Cho, K. Telework and Its Associations with Job Satisfaction and Turnover in the Los Angeles County Department of Public Social Services. Ph.D. Thesis, California State University, Northridge, CA, USA, 2020.
98. Aderaldo, I.L.; Aderaldo, C.V.L.; Lima, A.C. Critical aspects of telework in a multinational company. *EBAPE Noteb. Br.* **2017**, *15*, 511–533. [CrossRef]
99. Bentley, T.A.; Teo, S.T.; McLeod, L.; Tan, F.; Bosua, R.; Gloet, M. The role of organisational support in teleworker wellbeing: A socio-technical systems approach. *Appl. Ergon.* **2016**, *52*, 207–215. [CrossRef]
100. Public Sector Telework Trends during the Coronavirus Pandemic. Available online: <https://www.ipma-hr.org/stay-informed/hr-news-issues/hr-news-article/public-sector-telework-trends-during-the-coronavirus-pandemic> (accessed on 15 February 2021).
101. Donnelly, N.; Proctor-Thomson, S.B. Disrupted work: Home-based teleworking (HbTW) in the aftermath of a natural disaster. *New Technol. Work Employ.* **2015**, *30*, 47–61. [CrossRef]
102. OECD. Productivity Gains from Teleworking In The Post COVID-19 era: How Can Public Policies Make It Happen? In *OECD Policy Responses to Coronavirus (COVID-19)*; OECD Publishing: Paris, France, 2020.
103. Kramer, A.; Kramer, K.Z. The potential impact of the Covid-19 pandemic on occupational status, work from home, and occupational mobility. *J. Vocat. Behav.* **2020**, *119*, 103442. [CrossRef]
104. Milasi, S.; González-Vázquez, I.; Fernández-Macías, E. *Telework before the COVID-19 Pandemic: Trends and Drivers of Differences Across the EU*; OECD Publishing: Paris, France, 2021; p. 21. [CrossRef]
105. Nguyen, M.H. Factors influencing home-based telework in Hanoi (Vietnam) during and after the COVID-19 era. *Transportation* **2021**. [CrossRef]

106. Onyeizugbe, C.U.; Appiah, A.K. Managerial Teleworking: Antecedents and Consequences of Micro, Small and Medium Enterprises (MSMEs) in Nigeria. *Int. J. Soc. Sci. Manag. Res.* **2021**, *7*, 1–11.
107. Niraula, P.; Kautish, S. Study of The Digital Transformation Adoption in The Insurance Sector of Nepal. *LBEF Res. J. Sci. Technol. Manag.* **2019**, *1*, 43–60.
108. Al-Mamary, Y.H.; Shamsuddin, A.; Aziati, N. Investigating the key factors influencing on management information systems adoption among telecommunication companies in Yemen: The conceptual framework development. *Int. J. Energy Inf. Commun.* **2015**, *6*, 59–68. [[CrossRef](#)]
109. Yassae, M.; Mettler, T. Digital occupational health systems: What do employees think about it? *Inf. Syst. Front.* **2019**, *21*, 909–924. [[CrossRef](#)]
110. Berger, J.B.; Hertzum, M. Adoption patterns for the digital post system by Danish municipalities and citizens. *ECIS Proc.* **2014**. Available online: <https://aisel.aisnet.org/ecis2014/proceedings/track23/7/> (accessed on 29 August 2021).
111. Nwaiwu, F.; Kwarteng, M.A.; Jibril, A.B.; Buřita, L.; Pilik, M. Impact of security and trust as factors that influence the adoption and use of digital technologies that generate, collect and transmit user data. In *ICCWS 2020 15th International Conference on Cyber Warfare and Security*; Academic Conferences and Publishing Limited: Norfolk, VA, USA, 2020; p. 363.
112. Sari, H.; Othman, M.; Al-Ghaili, A.M. A proposed Conceptual Framework for Mobile Health Technology Adoption Among Employees At Workplaces in Malaysia. In *Recent Trends in Data Science and Soft Computing. IRICT 2018*; Advances in Intelligent Systems and Computing; Saeed, F., Gazem, N., Mohammed, F., Busalim, A., Eds.; Springer: Cham, Switzerland, 2019; Volume 843. [[CrossRef](#)]
113. Putzer, G.J.; Park, Y. The effects Of Innovation Factors On Smartphone Adoption Among Nurses In Community Hospitals. In *Perspectives in Health Information Management/AHIMA*; American Health Information Management Association: Chicago, IL, USA, 2010; Volume 7, pp. 1–20.
114. Li, Y.; Chandra, Y.; Kapucu, N. Crisis coordination and the role of social media in response to COVID-19 in Wuhan, China. *Am. Rev. Public Adm.* **2020**, *50*, 698–705. [[CrossRef](#)]
115. Todisco, L.; Tomo, A.; Canonico, P.; Mangia, G.; Sarnacchiaro, P. Exploring social media usage in the public sector: Public employees' perceptions of ICT's usefulness in delivering value added. *Socio-Econ. Plan. Sci.* **2021**, *73*, 100858. [[CrossRef](#)]
116. Jamal, M.T.; Anwar, I.; Khan, N.A.; Saleem, I. Work during COVID-19: Assessing the influence of job demands and resources on practical and psychological outcomes for employees. *Asia-Pac. J. Bus. Adm.* **2021**, *13*, 293–319. [[CrossRef](#)]
117. Nienaber, A.M.; Woodcock, A. *Digital Transformation in Public Administration—COVID 19 Created The Sense of Urgency*; Coventry University: Coventry, UK, 2020.
118. Ganapathy, S.; Rajamohan, M.S. Technology adoption in public sector banks—An employee centric study. *DogoRangsang Res. J.* **2020**, *10*, 345–355.
119. Tomé, E.; Gromova, E.; Hatch, A. Did the bubble burst? The Portuguese economy during COVID-19. *Manag. Marketing. Chall. Knowl. Soc.* **2020**, *15*, 477–495. [[CrossRef](#)]
120. Gaduena, A.; Caboverde, C.E.; Flaminiano, J.P. Telework Potential in the Philippines. Gaduena, Ammielou and Caboverde, Christopher Ed and Flaminiano, John Paul, Telework Potential in the Philippines. *AIM RSN PCC Discuss. Pap.* **2020**. [[CrossRef](#)]
121. Nagel, L. The influence of the COVID-19 pandemic on the digital transformation of work. *Int. J. Sociol. Soc. Policy* **2020**, *40*, 861–875. [[CrossRef](#)]
122. Jensen, L. Artificial Intelligence in the Public Sector: A Study of the Perceptions of AI in a Municipal Department and Their Effects. Master's Thesis, Umeå University, Umeå, Sweden, 2020.
123. Horii, M.; Sakurai, Y. The future of work in Japan: Accelerating automation after COVID-19. *McKinsey Insights* **2020**.
124. Berwick, D.M. Choices for the “new normal”. *JAMA* **2020**, *323*, 2125–2126. [[CrossRef](#)]
125. Cheng, Y.; Yu, J.; Shen, Y.; Huang, B. Coproducing responses to COVID-19 with community-based organizations: Lessons from Zhejiang province, China. *Public Adm. Rev.* **2020**, *80*, 866–873. [[CrossRef](#)] [[PubMed](#)]
126. Ito, N.C.; Pongeluppe, L.S. The COVID-19 outbreak and the municipal administration responses: Resource munificence, social vulnerability, and the effectiveness of public actions. *Rev. De Adm. Pública* **2020**, *54*, 782–838. [[CrossRef](#)]
127. Jilke, S.; Olsen, A.L.; Resh, W.; Siddiki, S. Microbrook, Mesobrook, Macrobrook. *Perspect. Public Manag. Gov.* **2019**, *2*, 245–253. [[CrossRef](#)]
128. Roberts, A. Bridging Levels of Public Administration: How Macro Shapes Meso and Micro. *Adm. Soc.* **2020**, *52*, 631–656. [[CrossRef](#)]
129. Howlett, M. Governance modes, policy regimes and operational plans: A multi-level nested model of policy instrument choice and policy design. *Policy Sci.* **2009**, *42*, 73–89. [[CrossRef](#)]
130. Pollitt, C.; Bouckaert, G. *Public Management Reform A Comparative Analysis—Into the Age of Austerity*, 4th ed.; Oxford University Press (OUP): Oxford, UK, 2017.
131. Guy, P. *Politics of Bureaucracy*, 5th ed.; Routledge: New York, NY, USA, 2002.
132. Hofstede, G.; Hofstede, G.; Minkov, M. *Cultures and Organizations: Software of the Mind*; McGraw-Hill: New York, NY, USA, 2010.
133. Howlett, M.; Ramesh, M.; Perl, A. *Studying Public Policy: Policy Cycles And Policy Subsystems*, 3rd ed.; Oxford University Press (OUP): Oxford, UK, 2009.
134. Suzuki, K.; Demircioglu, M.A. Is impartiality enough? Government impartiality and citizens' perceptions of public service quality. *Governance* **2020**, *34*, 727–764. [[CrossRef](#)]

135. Rinne, T.; Steel, G.D.; Fairweather, J. Hofstede and Shane revisited: The role of power distance and individualism in nation-al-level innovation success. *Cross-Cult. Res.* **2012**, *46*, 91–108. [CrossRef]
136. Makin, A.J.; Layton, A. The global fiscal response to COVID-19: Risks and repercussions. *Econ. Anal. Policy* **2021**, *69*, 340–349. [CrossRef]
137. Loia, F.; Adinolfi, P. Teleworking as an Eco-Innovation for Sustainable Development: Assessing Collective Perceptions during COVID-19. *Sustainability* **2021**, *13*, 4823. [CrossRef]
138. Bozeman, B. *All Organizations Are Public: Comparing Public and Private Organizations*; Beard Books: Washington, DC, USA, 2004.
139. Rainey, H.G. *Understanding and Managing Public Organizations*; John Wiley & Sons: San Francisco, CA, USA, 2009.
140. Wilson, J.Q. *Bureaucracy: What Government Agencies do And Why They do it*; Basic Books: New York, NY, USA, 2000.
141. Aoki, N.; Rawat, S. Performance-Based Pay: Investigating its International Prevalence in Light of National Contexts. *Am. Rev. Public Adm.* **2020**, 0275074020919995. [CrossRef]
142. Lapuente, V.; Suzuki, K.; Van de Walle, S. Goats or Wolves? Private Sector Managers in the Public Sector. *Governance* **2020**, *33*, 599–619. [CrossRef]
143. Meier, K.J.; Rutherford, A.; Avellaneda, C.N. *Comparative Public Management: Why National, Environmental, and Organizational Context Matters*; Georgetown University Press: Washington, DC, USA, 2017.
144. Suzuki, K.; Demircioglu, M.A. The Association Between Administrative Characteristics and National Level Innovative Activity: Findings from a Cross-National Study. *Public Perform. Manag. Rev.* **2019**, *42*, 755–782. [CrossRef]
145. Suzuki, K.; Hur, H. Bureaucratic structures and organizational commitment: Findings from a comparative study of 20 Eu-ropean countries. *Public Manag. Rev.* **2020**, *22*, 877–907. [CrossRef]
146. Mazzucato, M.; Kattel, R. COVID-19 and public-sector capacity. *Oxf. Rev. Econ. Policy* **2020**, *36*, S256–S269. [CrossRef]
147. Fukuyama, F. The imperative of state-building. *J. Democr.* **2004**, *15*, 17–31. [CrossRef]
148. The 2020 State of Remote Work. Available online: <https://lp.buffer.com/state-of-remote-work-2020> (accessed on 16 March 2021).
149. Baard, P.P.; Deci, E.L.; Ryan, R.M. Intrinsic Need Satisfaction: A Motivational Basis of Performance and Weil-Being in Two Work Settings. *J. Appl. Soc. Psychol.* **2004**, *34*, 2045–2068. [CrossRef]
150. Judge, T.A.; Thoresen, C.J.; Bono, J.E.; Patton, G.K. The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychol. Bull.* **2001**, *127*, 376–407. [CrossRef]
151. Wagner, J.A. Participation’s effects on performance and satisfaction: A reconsideration of research evidence. *Acad. Manag. Rev.* **1994**, *19*, 312–330. [CrossRef]
152. Núñez-Sánchez, J.M.; Gómez-Chacón, R.; Jambrino-Maldonado, C.; García-Fernández, J. Corporate Well-Being Programme in COVID-19 Times. The Mahou San Miguel Case Study. *Sustainability* **2021**, *13*, 6189. [CrossRef]
153. Bronfman, N.; Repetto, P.; Cordon, P.; Castañeda, J.; Cisternas, P. Gender Differences on Psychosocial Factors Affecting COVID-19 Preventive Behaviors. *Sustainability* **2021**, *13*, 6148. [CrossRef]
154. Gómez-Rey, P.; Fernández-Navarro, F.; Vázquez-De Francisco, M.J. Identifying Key Variables on the Way to Wellbeing in the Transition from Face-to-Face to Online Higher Education due to COVID-19: Evidence from the Q-Sort Technique. *Sustainability* **2021**, *13*, 6112. [CrossRef]
155. Roslan, N.S.; Halim, A.S. Enablers and Barriers to Online Learning among Medical Students during COVID-19 Pandemic: An Explanatory Mixed-Method Study. *Sustainability* **2021**, *13*, 6086. [CrossRef]
156. Ceular-Villamandos, N.; Navajas-Romero, V.; Caridad y López del Río, L.; Zambrano-Santos, L.Z. Workplace Situation and Well-Being of Ecuadorian Self-Employed. *Sustainability* **2021**, *13*, 1892. [CrossRef]
157. Blasco-Belled, A.; Tejada-Gallardo, C.; Torrelles-Nadal, C.; Alsinet, C. The Costs of the COVID-19 on Subjective Well-Being: An Analysis of the Outbreak in Spain. *Sustainability* **2020**, *12*, 6243. [CrossRef]
158. Demircioglu, M.A.; Chen, C.A. Public employees’ use of social media: Its impact on need satisfaction and intrinsic work motivation. *Gov. Inf. Q.* **2019**, *36*, 51–60. [CrossRef]
159. Gould-Williams, J.S.; Mostafa, A.M.S.; Bottomley, P. Public service motivation and employee outcomes in the Egyptian public sector: Testing the mediating effect of person-organization fit. *J. Public Adm. Res. Theory* **2015**, *25*, 597–622. [CrossRef]
160. Hameduddin, T.; Engbers, T. Leadership and public service motivation: A systematic synthesis. *Int. Public Manag. J.* **2021**, 1–47. [CrossRef]
161. Perry, J.L.; Vandenabeele, W. Public service motivation research: Achievements, challenges, and future directions. *Public Adm. Rev.* **2015**, *75*, 692–699. [CrossRef]
162. Perry, J.L.; Wise, L.R. The motivational bases of public service. *Public Adm. Rev.* **1990**, *50*, 367–373. [CrossRef]
163. Deci, E.L.; Ryan, R.M.; Gagné, M.; Leone, D.R.; Usunov, J.; Kornazheva, B.P. Need satisfaction, motivation, and well-being in the work organizations of a former eastern bloc country: A cross-cultural study of self-determination. *Personal. Soc. Psychol. Bull.* **2001**, *27*, 930–942. [CrossRef]
164. Gagné, M.; Forest, J.; Vansteenkiste, M.; Crevier-Braud, L.; Van den Broeck, A.; Aspeli, A.K.; Bellerose, J.; Benabou, C.; Chemolli, E.; Güntert, S.T. The Multidimensional Work Motivation Scale: Validation evidence in seven languages and nine countries. *Eur. J. Work Organ. Psychol.* **2015**, *24*, 178–196. [CrossRef]
165. Jiang, K.; Lepak, D.P.; Hu, J.; Baer, J.C. How Does Human Resource Management Influence Organizational Outcomes? A Meta-analytic Investigation of Mediating Mechanisms. *Acad. Manag. J.* **2012**, *55*, 1264–1294. [CrossRef]

166. Liu, D.; Jiang, K.; Shalley, C.E.; Keem, S.; Zhou, J. Motivational mechanisms of employee creativity: A meta-analytic examination and theoretical extension of the creativity literature. *Organ. Behav. Hum. Decis. Process.* **2016**, *137*, 236–263. [[CrossRef](#)]
167. Vroom, V.H. *Work and Motivation*; Jossey-Bass Publishers: San Francisco, CA, USA, 1994.
168. Gálvez, A.; Tirado, F.; Martínez, M.J. Work–life balance, organizations and social sustainability: Analyzing female telework in Spain. *Sustainability* **2020**, *12*, 3567. [[CrossRef](#)]
169. Bae, K.B.; Lee, D.; Sohn, H. How to Increase Participation in Telework Programs in US Federal Agencies: Examining the Effects of Being a Female Supervisor, Supportive Leadership, and Diversity Management. *Public Pers. Manag.* **2019**, *48*, 565–583. [[CrossRef](#)]
170. 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](#)]
171. Vivona, R.; Demircioglu, M.A.; Raghavan, A. Innovation and Innovativeness for the Public Servant of the Future: What, Why, How, Where, and When. In *The Palgrave Handbook of the Public Servant*; Sullivan, H., Dickinson, H., Eds.; Springer: Cham, Switzerland, 2020.
172. Taboroši, S.; Strukan, E.; Poštin, J.; Konjikušić, M.; Nikolić, M. Organizational commitment and trust at work by remote employees. *J. Eng. Manag. Comput.* **2020**, *10*, 48–60.
173. Criado, J.I.; Herranz, C.; Villodre, J. Informal Virtual Learning in the Public Sector: Educating Public Servants in Digital Social Innovation Environments. In *The Palgrave Handbook of the Public Servant*; Palgrave Macmillan: Cham, Switzerland, 2020; pp. 1–18.
174. Sust, P.P.; Solans, O.; Fajardo, J.C.; Peralta, M.M.; Rodenas, P.; Gabaldà, J.; Piera-Jimenez, J. Turning the crisis into an opportunity: Digital health strategies deployed during the COVID-19 outbreak. *JMIR Public Health Surveill.* **2020**, *6*, e19106. [[CrossRef](#)] [[PubMed](#)]
175. Zhang, W.; Wang, Y.; Yang, L.; Wang, C. Suspending classes without stopping learning: China’s education emergency management policy in the COVID-19 outbreak. *J. Risk Financ. Manag.* **2020**, *13*, 55. [[CrossRef](#)]
176. Belli, S. Effects of Digital Transformation in Scientific Collaboration. A Bibliographic Review. In *Applied Informatics*; ICAI. Communications in Computer and Information Science; Florez, H., Leon, M., Diaz-Nafria, J., Belli, S., Eds.; Springer: Cham, Switzerland, 2019; Volume1051. [[CrossRef](#)]
177. Gilson, L.L.; Goldberg, C.B. Editors’ Comment: So, What Is a Conceptual Paper? *Group Organ. Manag.* **2015**, *40*, 127–130. [[CrossRef](#)]
178. Watts, R.E. Developing a conceptual article for publication in counseling journals. *J. Couns. Dev.* **2011**, *89*, 308–312. [[CrossRef](#)]
179. Cinar, E.; Trott, P.; Simms, C. A systematic review of barriers to public sector innovation process. *Public Manag. Rev.* **2019**, *21*, 264–290. [[CrossRef](#)]
180. Hernández-Torrano, D.; Somerton, M.; Helmer, J. Mapping research on inclusive education since Salamanca Statement: A bibliometric review of the literature over 25 years. *Int. J. Incl. Educ.* **2020**, 1–20. [[CrossRef](#)]
181. Hur, H. Job security matters: A systematic review and meta-analysis of the relationship between job security and work attitudes. *J. Manag. Organ.* **2019**, 1–31. [[CrossRef](#)]
182. Soleas, E.K. Leader strategies for motivating innovation in individuals: A systematic review. *J. Innov. Entrep.* **2020**, *9*, 1–28. [[CrossRef](#)] [[PubMed](#)]
183. Van der Wal, Z.; Nabatchi, T.; De Graaf, G. From galaxies to universe: A cross-disciplinary review and analysis of public values publications from 1969 to 2012. *Am. Rev. Public Adm.* **2015**, *45*, 13–28. [[CrossRef](#)]
184. Yeo, J.; Huang, X. Migration in Public Administration Research: A Systematic Review and Future Directions. *Int. J. Public Adm.* **2020**, *43*, 176–187. [[CrossRef](#)]
185. Paloma, V.; Escobar-Ballesta, M.; Galván-Vega, B.; Díaz-Bautista, J.D.; Benítez, I. Determinants of life satisfaction of economic migrants coming from developing countries to countries with very high human development: A systematic review. *Appl. Res. Qual. Life* **2021**, *16*, 435–455. [[CrossRef](#)]
186. Cavus, N.; Sani, A.S.; Haruna, Y.; Lawan, A.A. Efficacy of Social Networking Sites for Sustainable Education in the Era of COVID-19: A systematic review. *Sustainability* **2021**, *13*, 808. [[CrossRef](#)]
187. Chahrour, M.; Assi, S.; Bejjani, M.; Nasrallah, A.A.; Salhab, H.; Fares, M.; Khachfe, H.H. A bibliometric analysis of COVID-19 research activity: A call for increased output. *Cureus* **2020**, *12*, e7357. [[CrossRef](#)] [[PubMed](#)]
188. Zhai, F.; Zhai, Y.; Cong, C.; Song, T.; Xiang, R.; Feng, T.; Liang, Z.; Zeng, Y.; Yang, J.; Yang, J.; et al. Research progress of coronavirus based on bibliometric analysis. *Int. J. Environ. Res. Public Health* **2020**, *17*, 3766. [[CrossRef](#)] [[PubMed](#)]