

**When virtual work goes viral:**

**How employees respond to a forced change from physical to virtual work set-ups**

Laurel H. Teo and Jia Hui Lim

Department of Organizational Behavior and Human Resources,  
Singapore Management University

**Author Note**

Laurel H. Teo  <https://orcid.org/0000-0002-8988-9584>

Jia Hui Lim  <https://orcid.org/0000-0002-0394-7959>

### **Abstract**

This position statement presents a research framework for employee response and adaptation to abrupt change, in the context of the adoption of remote work arrangements in crisis conditions. The unprecedented scale of the COVID-19 pandemic forced many organizations to move most of their physical operations online in a matter of days. Imposed by government lockdown measures, this change from physical to virtual work arrangements came suddenly and caught many organizations off guard, since prior to the pandemic, only a mere 2.9 percent of employees worldwide were involved in telework. Given the abrupt nature of the change and the virtual work context, we believe two specific literatures – organizational change and virtual work – are critical to understanding the dynamics of employees' responses. The first part of our paper provides an integrated review of these two streams of research. Using concepts from the organizational change literature, we build a framework that incorporates prior literature on remote work and virtual teams to develop an emergent research agenda. Drawing on our integrated literature review, we propose specific mechanisms via which the change would have occurred. The second part of our paper outlines the plans for an inductive study to explore these questions and build theory. The third and final part of our paper concludes with a brief outline of potential future research questions beyond the scope of the inductive study proposed here.

*Keywords:* organizational change, telework, distributed work, virtual teams, COVID-19

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The unprecedented scale of the global health crisis sparked by the coronavirus-19 (COVID-19) pandemic has forced cities, states and entire countries around the world to impose severe lockdowns, driving many organizations to move most – if not all – of their physical operations online, often within a matter of days. Unfortunately, effective organizational changes are rare (Burnes & Jackson, 2011), not least in this instance when the change came rather abruptly and caught most of these organizations off guard. Indeed, before the COVID-19 crisis, only 2.9 percent of employees globally worked exclusively or mainly from home as teleworkers (International Labour Organization, 2020a). But by the end of March 2020, mandatory or recommended workplace closure measures imposed by governments all over had affected 81 percent of the global workforce (ILO, 2020b). To be able to continue operations, most of these affected workers and their organizations would have had to convert to remote work. However, a survey conducted by the Japan Association for Chief Financial Officers (JACFO) drove home the sobering point that many companies were simply not equipped to make the conversion. The survey found that just prior to the Japanese government announcing the State of Emergency on April 7, 96 percent of the JACFO survey respondents agreed that teleworking was important, but 31 percent could not adopt the practice because they did not have the necessary policies and arrangements in place [JACFO, 2020].

Given that the abrupt switch from office to remote home-based working likely posed a highly disruptive change to a vast majority of organizations and their employees, we believe it would be relevant to adopt a change management or organizational change perspective to understand the dynamics of employees' response in this development. Within the organizational change framework, we review and incorporate prior literature on

distributed work (in particular, research on telework and virtual teams) to develop a relevant, emergent research agenda. We believe that it is vital to integrate these two perspectives (change management and virtual/remote work), as neither alone would be adequate for studying this unprecedented situation. Drawing on our integrated literature review, we propose specific mechanisms via which the change would have occurred. We further outline the plans for an inductive study and provide details below to explore these questions and build theory.

In our research, we choose to focus on employees and understand how they have coped with the change of going virtual in the past few months. We acknowledge that this is merely one side of the coin, as researchers ought to also investigate how companies implemented and continuously managed the change. These two perspectives are not mutually exclusive, but we want to focus on one main question: What do employees consider when making their decision to embrace or resist this virtual change effort? Understanding their motivations, emotions, and reactions will provide theoretical and practical insights on how to best lead related changes.

We exclude from this current research consideration employees already experiencing significant or fully distributed work practices prior to the pandemic, as well as employees newly recruited or onboarded during this crisis period, as our focus is on the change experience – i.e. moving from physical to virtual work environments. Having said that, we believe it would be extremely important to examine this latter group (i.e. new employees recruited and onboarded in a fully remote condition) as part of a future research agenda.

### **Overview of Remote Work and The Virtual Workplace**

Modern research on decentralized or remote work arrangements dates back to more than 40 years ago (Olson & Primps, 1984; Nilles, 1975; Nilles, 1988), hailing from multiple disciplines ranging from traffic and transport to information systems, managerial sciences

and sociology. Often grouped under the umbrella term “distributed work”, this mode of work refers broadly to arrangements that allow employees to perform their tasks away from their organization’s centralized business location and to share their tasks with coworkers who are not physically co-located, typically by relying on communication technology to interact with others for their work (Bélanger & Collins, 1998; Gajendran & Harrison, 2007; Rockmann & Pratt, 2015). At its core, distributed work arrangements involve the management and facilitation of employees and tasks dispersed across temporal, spatial and even cultural distance (Hinds, Kiesler, & Kiesler, 2002). Among the variants of distributed work, the two variants most relevant to our research topic and on which our discussion here focuses are telework and virtual teams.

Telework or telecommuting is a work arrangement in which employees perform their work for part or all of the time away from their employers’ main premises, usually principally from their homes with the aid of information and communication technologies (Allen, Golden, & Shockley, 2015; Gajendran & Harrison, 2007; Messenger, 2019). A key feature of telework is flexibility in *where* work is completed (“flexplace”), and sometimes – but not always – flexibility in *when* work is completed as well (“flextime”) (Allen, Johnson, Kiburz, & Shockley, 2013). Earlier studies on telework tended to compare the outcomes of teleworkers versus non-teleworkers, largely treating the phenomenon as a dichotomous condition (Messenger, 2019). Subsequent literature has adopted a more nuanced approach by treating telework as a continuous variable (intensity of telework), examining its effect on employee attitudes and outcomes such as job satisfaction, organizational commitment and identification, performance (task and context-related), turnover intentions, work-related and role stress, wages and career prospects (Allen et al., 2015; Gajendran & Harrison, 2007; Gajendran, Harrison, & Delaney-Klinger, 2015). A number of these studies also examine the mechanisms that mediate between telework and employee outcomes. For instance, meta-

analytic studies have shown that telework leads to increased perceived autonomy and lower work-family conflict, which in turn improve job satisfaction and reduce turnover intentions as well as role stress (Gajendran & Harrison, 2007).

While telework research tends to focus on the individual, research on virtual or distributed teams investigate how team members interact with and respond to each other when they are not physically co-located and have minimal face-to-face encounters, addressing, in particular, team processes and outcomes. Virtual teams are defined as collections of employees dispersed across geography and/or time, who are brought together by information and communication technologies to accomplish organizational tasks (Bell & Kozlowski, 2002; Powell, Piccoli, & Ives, 2004). Given that the focus is on teams and collaborative efforts, much of the literature examines coordination, communication and other interpersonal and relationship issues (e.g. development of trust and cohesiveness among team members), as well as the resolution of ambiguities and conflict that arise from the distance between (and often, diversity among) members, and how these factors ultimately influence team effectiveness and performance (Armstrong & Cole, 2002; Gilson, Maynard, Young, Vartiainen, & Hakonen, 2015; Powell et al., 2004).

Notably, not all employees in virtual teams are teleworkers. Members of virtual teams could be operating out of the office but collaborating virtually with team members based in another office or country. Likewise, not all teleworkers are part of a virtual team – they could be the only remote worker in an otherwise non-remote team comprising coworkers who are physically co-located. In the context of the COVID-19 pandemic, most employees would be working from home as teleworkers, while isolated – and thus dispersed or distributed – from each other in the organization. They would be *teleworkers participating in all-virtual teams*.

## Change Mechanisms

Below we examine various mechanisms that can account for how switching to remote work dynamically influences employee attitudes and behaviors, as well as their implications.

### Employee Cognition

The change management literature posits that there are five key change beliefs: *Discrepancy* (necessity of change), *appropriateness* (of specific changes to address discrepancy), *efficacy* (of employees and the organization to implement successful change), *principal support* (commitment of leaders to change), and *valence* (benefits of change) (Armenakis & Bedeian, 1999; Armenakis, Harris, 2009; Armenakis, Harris, & Mossholder, 1993). These five beliefs play an important role in the change process. For instance, the more appropriate managers considered the strategic vision (against which discrepancy or necessity of the change was assessed), the stronger their affective reactions and involvement in the change (Oswald, Mossholder, & Harris, 1994). In the context of the COVID-19 pandemic, how did employees view the implemented change when it first occurred? How did the inevitability of the overall change to remote work (imposed by extraordinary crisis conditions) influence perceived discrepancy? How did these five factors change over the past few months? We anticipate that most employees would not doubt the necessity of nor resist the overarching change to virtual work induced by the COVID-19 pandemic. We focus instead on their response to specific new arrangements or policies implemented. Given that most organizations had to make the switch to remote work, did employees compare their experience against changes implemented in other organizations and if so, how did it influence the perceived appropriateness of specific changes in their own organization. Next, we investigate whether there was involvement and participation by employees when it came to implementing the change. Was their feedback taken into consideration by managers to improve the telecommuting experience? The opportunity to participate in communicating

would increase the likelihood that appropriate changes were selected. For instance, employees might have made suggestions about how to improve team discussions and make them more efficient—was this feedback implemented? When and why?

### **Employee Emotion**

Change often triggers intense emotions (Avey, Wernsing, & Luthans, 2008; Smollan & Sayers, 2015). While some researchers have chosen to take a positive perspective (Agote, Aramburu, & Lines, 2016; Avey et al., 2008), others have focused on negative emotions (e.g., Fugate, Kinicki, & Scheck, 2002; Kiefer, 2005). For instance, Kiefer (2005) found that perceptions of an insecure future and inadequate working conditions, and inadequate treatment by the organization during the change process led to employees experiencing negative emotions. Furthermore, negative emotions were related to lower trust levels and subsequent withdrawal from the organization (Kiefer, 2005). Within the virtual work literature, researchers often invoke media richness theory to suggest that relying more frequently on computer-mediated communication (CMC) and less on face-to-face interaction makes it more difficult to send and receive affective cues (Gajendran & Harrison, 2007), and also lowers levels of positive affect among virtual team members (Johnson, Bettenhausen, & Gibbons, 2009). Feelings of social and professional isolation, as well as a lack of connection to the organization, have also been associated with virtual work (Bélanger, Watson-Manheim, & Swan, 2013; Cooper & Kurland, 2002; Pinsonneault & Boisvert, 2011; Rockmann & Pratt, 2015).

Given that the change to go virtual was abrupt and disruptive, we seek to understand how this change influenced employee emotions and whether and how their emotional reactions were addressed by themselves, their managers, or organizations. Given the combination of the change into a virtual setting and a macro socio-economic environment fraught with uncertainties, did employees mostly experience negative emotions or did they

experience positive emotions? Were feelings of loneliness and isolation exacerbated by minimal social contact as a result of social distancing measures? Or were such feelings, if any, offset or mitigated by increased virtual contact and support from everyone else equally afflicted by lockdown measures, as suggested by a recent study that found that American adults perceived having more support from others and being emotionally close to them, such that they felt no changes in loneliness levels during the COVID-19 pandemic (Luchetti et al., 2020)

Furthermore, organizational norms about how emotions are experienced and expressed play an important role during organizational changes. It would be interesting to study whether and why perceptions of organizational norms about emotion experience and expression influence how employees cope during the ongoing change.

### **Employee Identity**

Van Dijk and van Dick (2009) found that change can undermine an employee's identity, particularly in terms of social status, while resistance to change undermines a change in leader's identity as a person with power. At the same time, sharing a powerful and adverse experience together promotes ingroup-focus, team bonding and a stronger shared identity (Bastian, Jetten, Thai, & Steffens, 2018). Having a stronger shared team identity reduces the positive association between distributed work teams and interpersonal conflict (Hinds & Mortensen, 2005). In this current context, how would a combination of dealing with abrupt change amid a challenging but common-to-all social and work environment influence an employee's work and team identities?

### **Managerial Influence Strategies**

Influence strategies are an important part of the change process. The change management literature has identified several strategies that are most commonly researched on: active participation, persuasive communication, management of internal and external

information, formalization activities, human resource management practices, diffusion practices, and rites and ceremonies (Armenakis & Harris, 2009). Given that the change is specific to going virtual, we study whether and how the managerial strategies are adapted by managers to the situation. For instance, how did managers encourage active participation in team meetings? Did the company actively manage the flow of information regarding COVID-19? Was the human resources department actively managing the employee responses to the pandemic (e.g., installing a hotline, sending out online updates, etc.)? How did these strategies influence employee cognitions and emotions during the ongoing change?

### **Collaborative Processes**

Researchers of virtual teams have devoted considerable effort to studying team processes. Action processes such as communication, coordination and knowledge sharing are critical predictors of team efficiency and effectiveness, but these processes tend to be weaker as virtuality increases (Gilson et al., 2015). This is often attributed to the relative lack of non-verbal cues and heavier reliance on asynchronous communication in virtual interactions, as well as the lack of mutual knowledge and a shared language (Powell et al., 2004). At the same time, researchers have found that virtual teams tend to be more task-focused and less social-focused, compared to traditional teams, and this can impede social-emotional processes such as relationship-building, with negative implications on team cohesion and trust (Powell et al., 2004). As a further disadvantage, virtual interactions lack the “social facilitation” effect present in-person interactions, which increases people’s attention on and involvement in group activities (Kiesler & Cummings, 2002). Compared to traditional teams, distributed or virtual teams are also associated with higher task and interpersonal conflict (Hinds & Mortensen, 2005). However, for groups who have already gathered experience working as a traditional, physically co-located team, would the sudden change to a virtual mode influence how team members adopt and respond to these new virtual processes? Would

switching to new collaborative processes influence their team-level outcomes? Or would pre-existing ties and team experience buffer any potential negative impact? How would these processes evolve as teams spend more time in virtual mode?

Kiesler and Cummings (2002) note in their review that a key flaw of distribution or distance between work locations is that it offers minimal, if any, opportunities for informal, spontaneous contact, such as conversations at the water cooler or office pantry. Such casual encounters increase the ease and frequency of communication, improving coordination and facilitating the process of identifying and handling conflict (Hinds & Mortensen, 2005). Importantly, informal and social unstructured interactions can also facilitate individual as well as collective creativity. Hargadon and Bechky (2006) found in a qualitative study that informal interactions (e.g. popping down the hallway to a coworker's desk) through which employees seek and give help could sometimes be more important and useful in devising creative solutions, than formal meetings and brainstorming sessions. Gratton (2020) suggests that serendipitous encounters at work can create a rich and diverse network of weak ties that can serve as a resource for innovation. It would be interesting to investigate if traditional-turned-virtual team members are affected by the sudden lack of casual interactions such that they seek to "recreate" such interactions or develop substitutes, a point that we explore in further detail in the next section.

### **Replacement and Coping Mechanisms**

In this section we discuss how employees cope with changes by renegotiating and redesigning their work experiences, through job crafting and replacement mechanism.

#### **Job Crafting**

Job crafting allows employees to change the task boundaries of a job, cognitive task boundaries of a job, and the relational boundaries of a job (Petrou, Demerouti, & Schaufeli., 2018). It has been defined as a voluntary, self-initiated behavior that includes three different

dimensions: seeking resources, seeking challenges, or reducing job demands (Petrou et al., 2018). Job crafting can therefore be a daily behavior that employees engage in during the process of change.

Seeking job resources involves asking colleagues or managers for feedback about performance or advice about work-related issues (Petrou et al., 2012). These job resources serve to provide employees with more tools to improve their performance and engagement at work (Hobfoll, 2001). The job resources are even more useful during change processes because they help employees to reduce uncertainty and cope with change (Robinson & Griffiths, 2005), and to adjust to the new situation (Terry, Callan, & Sartori, 1996). Employees also seek job challenges by looking for new tasks or taking on more or new responsibilities. Research has shown that focusing on challenging aspects of the change improves employee work engagement (Petrou et al.) and employee adjustment (Amiot, Terry, Jimmieson, & Callan, 2006). Finally, reducing demands is a crafting strategy targeted at minimizing the emotional, mental, or physical demands of one's work (Petrou et al., 2012). Such responses are typically labeled as withdrawal-oriented coping response to counter change (Parker & Endler, 1996). Taken together, we aim to study whether and why employees engage in job crafting during these past few months of change? What were the strategies they used? How did engaging in job crafting make them feel about their work?

### **Substitutions and Replacements**

While there is little formal research on whether and how employees devise replacements or new ways to reclaim valued aspects of the work experience lost during organizational change, there is anecdotal evidence that managers and employees have made some attempts in the COVID-19 pandemic. A rash of business media articles have highlighted the different ways in which organizational members try to stay socially connected online. Some use apps to play social games (e.g. polls and trivia quizzes) with coworkers

(Rajendran, 2020), while others have set up virtual coffee breaks in chatrooms, moved happy hours online, and even tagged on “play dates” for their children at the end of work meetings (Liu, 2020). Experts are also offering tips on hosting virtual networking sessions (Clark & Cohn, 2020), even as some organizations attempt to recreate spontaneous social encounters online to facilitate creative collaboration. Some have introduced collaborative “jam” platforms for more than 20,000 online participants (Gratton, 2020). We want to study the type of experiences and processes that employees focus on replacing, as well as the validity of such replacement mechanisms.

### **Study Plan**

We intend to build, integrate and extend theory in the areas of change management and virtual work. Given that the phenomenon is unprecedented, we expect that existing theory would likely be inadequate and thus an inductive grounded theory approach would be required for our empirical investigation (Corbin & Strauss, 2008). The grounded theory approach is also appropriate for our research focus on “how” processes and on exploring potential new dynamics in the abrupt change from physical to virtual office, under dramatic macro crisis conditions (Eisenhardt, 1989). In line with this approach, we aim to conduct purposeful rather than random sampling, choosing a context that clearly and strongly represents the phenomenon of interest (Eisenhardt, 1989). We will target two to three organizations from similar industries (e.g. knowledge sector). These firms would have had minimal virtual work arrangements under normal operating circumstances, but were forced by lockdown measures during the pandemic to convert most employees to virtual work arrangements. Studying more than one organization within similar industries will offer variety in the specific changes and change responses, yet ensure that these differences would not be due to substantive differences between the nature of the organizations’ business. Our data collection will be drawn largely from two primary sources: 1) semi-structured

interviews; and 2) observations of virtual team interactions. The interviews would be conducted with affected existing (rather than new) employees, who would have experienced the change and new work arrangements for a period of at least four weeks and up to 16 weeks. This range ensures that participants would have been sufficiently immersed in the change process and also provides an opportunity for studying temporal dynamics in the change process. In addition to interviews, we also plan to observe regular team interactions conducted on virtual platforms. These include regular weekly meetings to discuss team goals and tasks, meetings to discuss specific projects, as well as meetings for informal socialization (e.g. virtual “fire-side chats”). The teams under observation should have had prior experience working and interacting largely face-to-face as a team in the physical office, before moving to a virtual setting. Further to the collection of qualitative data, we may, as appropriate, supplement the data with short surveys.

### **Future Research Directions and Conclusion**

As noted in our introduction, our paper focuses on employees. For future research, we hope to adopt a similar approach to study leaders and employers in similar context. Having built theoretical propositions in this area, we aim to develop quantitative studies to test and establish causal relationships.

While the COVID-19 pandemic may be a new phenomenon, emerging evidence indicates that it is far from a temporary incident, and that its consequences would not be short-lived. Even as some countries begin easing their lockdown measures and returning to regular work arrangements, many markets such as Australia, China, South Korea, Europe and the United States are reporting a resurgence in the virus outbreak (Aubusson, 2020; Merchant, N. & Lozano, J.A., 2020; The Straits Times, 2020). Newly published research suggests that outbreaks will continue to recur and that “prolonged or intermittent social

distancing may be necessary into 2022” (Kissler, Tedijanto, Goldstein, Grad, & Lipsitch, 2020, p. 860). In line with this projection, organizations would likely have to retain a certain degree of virtual work arrangements on a prolonged basis, either continuously or intermittently (as and when required by safe-distancing laws). As such, we believe it is imperative that more research is developed to better understand the process of transitioning into virtual work. In the medium to longer-term, it would be interesting to study how receptive employees would be to revert to in-office arrangements, and whether and how much their reactions and expectations may be influenced by having experienced a different (virtual) work arrangement. It would also be interesting to examine how the organizations’ experience during the initial pandemic period will influence their subsequent contingency plans. We believe our emergent work in integrating and extending theory in change management and virtual work has important theoretical and practical implications, and will provide a solid basis for future research in this area.

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