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**The influence of social distancing on employee wellbeing:**

**A conceptual framework and research agenda**

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**Abstract**

**Purpose** – The ongoing pandemic caused by the COVID-19 virus has severely influenced lives and livelihoods. As service organizations either face hibernation or continuity of their business operations, the impact of social distancing measures raises major concerns for the wellbeing of service employees. In this paper, we develop a conceptual framework to examine how different social distancing practices impact an organization’s service continuity or service hibernation, which in turn affects different dimensions of their employees’ subjective wellbeing during the COVID-19 pandemic.

**Design/methodology/approach** – We draw on macroeconomic data and industry reports, linking them to theoretical concepts to develop a conceptual framework and a research agenda to serve as a starting point to fully understand the impact of this pandemic on employee wellbeing.

**Findings** – This article develops an overarching framework and research agenda to investigate the impact of social distancing practices on employee wellbeing.

**Originality/value** – We propose two opposing business concepts—service continuity and service hibernation—as possible responses to social distancing measures. By bridging different theoretical domains, we suggest there is a need to holistically examine macro, meso, and micro factors to fully understand the impact of social-distancing-related measures on employee wellbeing.

**Keywords:** COVID-19, Coronavirus, Employee wellbeing, Service continuity, Service hibernation, TSR

## 1. Introduction

The ongoing pandemic caused by the COVID-19 virus has led to a major global crisis affecting billions of people and having a destructive impact on global economies (Kabadayi *et al.*, 2020). Since its outbreak, medical and public health experts have offered different guidelines to slow down the virus’s transmission. The most commonly offered measure has been *social distancing*, which refers to “efforts that aim [...] to decrease or interrupt transmission of COVID-19 in a population (sub-)group by minimizing physical contact between [...] individuals, or between population groups with high rates of transmission and population groups with no or a low level of transmission” (European Centre for Disease Prevention and Control [ECDC], 2020, p. 2). Social distancing includes a variety of measures with different impacts for different stakeholders (e.g., voluntary or mandatory self-quarantine and shelter-in-place orders, workplace and school closures, shifts to work-from-home, service-at-a-distance, and cancellations of public mass gatherings such as sporting and cultural events) (see ECDC, 2020).

While social distancing efforts aim to contain the virus and contribute to public health, they also create unprecedented challenges for service organizations and their employees around the world. Economic data and industry reports indicate ‘service mega-disruptions’ created by

COVID-19 for businesses, in particular for the services sector (Kabadayi *et al.*, 2020), with many companies struggling to maintain their ‘service continuity,’ while others are just ‘hibernating’ or even shutting down their operations, creating major implications and consequences for service employees and their wellbeing.

Prior research has studied the economic impact of social distancing as a disease control strategy undertaken by healthy individuals (Maharaj and Kleczkowski, 2012). However, no study has examined the impact created by social distancing during a pandemic on service organizations and the wellbeing of their employees. This article responds to the lack of research on service employee wellbeing (Edgar *et al.*, 2017; Nasr *et al.*, 2015) by developing a service ecosystem-based approach to investigate the impact of social distancing practices on employee wellbeing. More specifically, this framework suggests that as a result of social distancing practices, service organizations need to adopt ‘service continuation’ or ‘service hibernation’ and that this decision affects different dimensions of their employees’ wellbeing. Such understanding of employee wellbeing would be an important step in improving service ecosystem wellbeing during and after a pandemic (Finsterwalder and Kuppelwieser, in press).

This paper offers four contributions to the literature. First, it proposes two opposing concepts—service continuity and service hibernation—as possible responses to social distancing measures. To the authors’ best knowledge, this is the first paper to introduce these terms in service research. Second, it develops an overarching framework to investigate the impact of social distancing practices on employee wellbeing as necessitated by the COVID-19 pandemic. The framework identifies different macro-, meso-, and micro-level factors that may moderate the impact of social distancing and subsequent service continuity and service hibernation on employee wellbeing. Third, it contributes to the growing field of Transformative Service Research (TSR) (Anderson *et al.*, 2013; Anderson and Ostrom, 2015; Finsterwalder *et al.*, 2017;

Kuppelwieser and Finsterwalder, 2016), which posits that service organizations can contribute to the wellbeing not only of their customers but also employees and communities as well. While employees play a crucial role in service delivery, studying their wellbeing remains a marginalized topic within service research. Thus, this paper answers the call for studies to investigate factors that impact employee wellbeing. Finally, based on the framework, this paper develops a list of research themes and questions that will help scholars to gain new insights into employee wellbeing in light of the pandemic.

## **2. Theoretical background**

### *2.1. Service business decisions during COVID-19: hibernation versus continuity*

As social distancing measures constitute the core component of efforts to contain the virus, governments around the world have imposed restrictions on which businesses can stay open, leading to the distinction between ‘essential’ and ‘nonessential’ businesses (Jiang, 2020). Furthermore, a new class of businesses is emerging, referred to as ‘non-essential essentials’ (e.g., jewelers, dentists), which are expected to remain open but stand empty without customers (Crabb, 2020). In the midst of dealing with the health crisis, in March 2020 the Australian Government announced an unprecedented ‘hibernation’ policy: that small businesses struggling with the economic fallout of the COVID-19 pandemic should ‘go to sleep’ like a bear hunkering down for the sparse winter (Dervin, 2020; Elmas, 2020). Furthermore, Australia called for the global economy to be put into ‘controlled hibernation’ during the pandemic (Macmillan, 2020). The Australian hibernation strategy involves \$130-billion worth of wage subsidies to try to keep as many people in jobs as possible—even if businesses close for up to six months (Worthington, 2020). Businesses and people have embraced the hibernation term because it gives a sense that the crisis is temporary (Kehoe, 2002).

While, to the best of our knowledge, the term ‘(service) hibernation’ has not been used in the marketing or management literature so far, the topic of hibernation has received considerable attention in academia from natural historians and physiologists (Boyles *et al.*, 2020; Rasmussen, 1916). Hibernation (or winter sleep) refers to a dormant state, seen in nature among mammals and birds, in which vital physiological and behavioral processes are greatly reduced to conserve energy and increase survival (Turbill *et al.*, 2011). The topic has further gained attention in science and medicine in the context of induced hibernation (e.g., Blackstone *et al.*, 2005) to develop medical applications (e.g., trauma care) and enable extended space travel (Panko, 2017).

Following hibernation research that suggests a “nuanced view of balanced costs and benefits” of hibernation (Boyles *et al.*, 2020, p. 98; Humphries *et al.* 2003), this paper proposes ‘service hibernation’ as a new concept that describes an organization’s decision (mandated or voluntary) to scale back and/or shut down its service functions and operations during the COVID-19 pandemic. Furthermore, we propose the concept of ‘service continuity’ as the opposite strategy of hibernation to navigate the uncertain business environment during the COVID-19 global outbreak. The term ‘business continuity’ has been used in the context of disaster preparation and management (e.g., ABA, 2011) and describes an organization’s ability to maintain essential functions and operations (e.g., health and safety, supply chain and facilities management) during and after a disaster (Rampton, 2015). However, a recent ‘Business Continuity Survey’ by Gartner (2020) shows that only a small fraction of organizations are prepared for the impact of COVID-19. Governments have released fact sheets and guidelines to support business continuity plans in the event that an organization’s services are affected by COVID-19, which includes monitoring employee wellbeing (New South Wales Government, 2020).

## 2.2. Employee wellbeing

The topic of employee wellbeing has been recognized as a significant issue for employees, employers, and society (Deloitte, 2017; REBA, 2019). It is a fundamental consideration for how organizations can achieve a competitive advantage, with growing evidence suggesting that employee wellbeing is linked to various performance metrics, including productivity, employee turnover, job satisfaction, stress, and work–life balance (e.g., Bakker and Oerlemans, 2011; Keeman *et al.*, 2017). Furthermore, it not only relates to employees’ overall wellbeing and life satisfaction (Bowling *et al.*, 2010) but also affects health care at the national level (Goh *et al.*, 2015). Even though wellbeing is important within all work contexts, it is particularly salient for the service industry in which frontline employees are central to service encounters with customers. However, while employee wellbeing is recognized as a priority of TSR (Anderson *et al.*, 2013), its investigation has been limited with a few exceptions. For example, at the organizational level, a few studies have examined how company practices affect employee wellbeing (e.g., Sharma *et al.*, 2016), and at the customer–employee interaction level, Nasr and her colleagues (2014, 2015) studied the impact of customer feedback on frontline employee wellbeing.

The topic of employee wellbeing becomes even more critical during a pandemic. On the one hand, frontline employees who provide ‘essential’ services (e.g., health care, grocery stores, pharmacies, long-term care homes) face increasing health risks in terms of infection, stress, and mental illness (Sim, 2020) while, on the other, the sudden shift to work-from-home and self-isolation is causing unanticipated mental health consequences, such as anxiety, loneliness, and depression (Braverman, 2020; Staglin, 2020), which have led to an increase in substance abuse and even suicide (Higgins-Dunn, 2020). Furthermore, employers that fail to prioritize employee wellbeing have been called out on social media, potentially damaging their reputation (Cassidy, 2020).

Even though there is no universally agreed-upon definition or conceptualization, wellbeing is viewed as a multidimensional phenomenon (e.g., Ryan and Deci, 2001). Some studies conceptualize employee wellbeing as psychological health versus job satisfaction (Lawson *et al.*, 2009). Initial research into employee wellbeing focused primarily on employee mental health, personality traits, and stress (e.g., Danna and Griffin, 1999; Hayman, 2010). Since then, research has grown to include broader dimensions of wellbeing: psychological (i.e., subjective happiness and satisfaction), physiological (i.e., physical and physiological wellness), and social (i.e., interpersonal relationships) (Grant *et al.*, 2007; Ponting, 2020). Some scholars have called for a better understanding of how employee wellbeing is conceptualized and operationalized in service industries (Ponting, 2020). Given the detrimental impact of COVID-19 on the economy, we include four different dimensions of wellbeing: physical, mental (i.e., psychological), social, and financial (Table 1).

(Insert Table 1 here)

A large stream of employee wellbeing research adopts the Job Demands-Resources (JD-R) model (Bakker and Demerouti, 2007) to understand which factors determine employee wellbeing. This model suggests that job demands that require sustained efforts and skills, and job resources that may be functional in meeting those demands, are related to different dimensions of employee wellbeing (Bakker and Demerouti, 2007). The levels of job demands and resources are influenced by external forces, including economic and industry-related factors, government policies, and technology (Bakker *et al.*, 2003). Also, changes in those external factors lead to changing demands and resources for employees, which, in turn, create implications for their wellbeing (Brauchli *et al.*, 2013).

As organizations struggle with the impact of social distancing policies and the business decision of service hibernation versus service continuity, drivers of employee wellbeing as a



result of social distancing have dramatically become more complex, involving different facets depending on the organizational context and the wider socio-political boundaries of social distancing.

### **3. Service ecosystem-based approach to employee wellbeing during a pandemic**

Based on the JD-R model as explained above, and the examples and practices reported in the recent popular press, we identify various macro- and meso-level factors in a service ecosystem that affect job resources and demands for employees during this pandemic. Furthermore, based on the needs as defined by self-determination theory—that is, competence and belongingness (Deci and Ryan, 2000)—and various coping mechanisms used by employees (Hogan, 2007), we also identify several micro-level factors that determine the impact of social distancing and the subsequent service continuity versus service hibernation decision of service organizations on employee wellbeing (see Figure 1). The list of factors included here is not meant to be exhaustive, and the factors may have compounding effects on employee wellbeing.

(Insert Figure 1 here)

#### *3.1. Macro level: government response to COVID-19*

Governments try to achieve two conflicting but equally important objectives when it comes to their policies and regulations during a pandemic: they try to minimize exposure to COVID-19 and slow its spread while keeping as much of the economy going as possible (Kirk, 2020). Around the world, governments have taken various *public health*-related and *legal* measures (e.g., lockdowns, travel bans, and restrictions on nonessential businesses) to achieve the first objective and *economic* measures (e.g., stimulus packages) to achieve the second. While these measures need to be examined to understand how government policies affect employee wellbeing, the differences in terms of how the pandemic is handled in different countries also need to be considered.

Initially, many governments responded to the COVID-19 crisis by issuing travel restrictions between certain countries and advisory measures like work-from-home to promote social distancing. However, when they realized that the virus had already spread, many governments switched to mandatory restrictions like lockdowns and travel bans. A lockdown relies on the idea of government-mandated social distancing and aims to stop the movement of people, with the exception of receiving medical care or buying food ([www.hopkinsmedicine.org](http://www.hopkinsmedicine.org)). Additionally, such lockdowns usually require closing nonessential businesses and limiting operations of even essential businesses. While the definition of essential versus nonessential businesses may change from country to country (Kirk, 2020), nonessential businesses generally include public entertainment venues like movie theaters, stadiums, retailers, and other small businesses. Even essential businesses like restaurants and grocery stores are required to change the way they serve their customers.

Naturally, such government response creates a tremendous impact on many industries, forcing service organizations to choose between service continuity and service hibernation. For example, the airline industry faces billions of dollars in lost revenue, and millions of airline employees are looking at massive layoffs (Ghosh, 2020). Similarly, the hospitality industry has sustained one of the heaviest blows as a result of government lockdowns and restrictions (Dixon, 2020). Many restaurants had to change their operations from dine-in to take-away or delivery to be able to continue their businesses. Furthermore, many grocery stores had to adopt delivery options to comply with government restrictions regarding social distancing practices. On the other hand, many other businesses deemed as “nonessential” by governments, such as retailers, hair salons, and gyms, had to hibernate, waiting for government restrictions to ease.

While government lockdowns and travel bans hurt numerous businesses, ironically, employee wellbeing in many industries also depends on government support in the form of

financial aid and economic stimulus packages. While each country experiences economic shocks differently, governments have implemented record-breaking stimulus packages in response to COVID-19's economic impacts (Cavanough and Tai, 2020), ranging from loans to small businesses (Sammer, 2020), wage subsidies and tax deferment (Wood, 2020), and cash payments during unemployment (Canadian Press, 2020). All these financial aid and stimulus packages not only offer relief in terms of employee job loss and financial wellbeing but also provide health-care-related benefits to employees to ensure their continued physical and mental wellbeing.

### *3.2. Meso level: the influence of industry-related factors*

While COVID-19 is having a devastating impact on the global economy, its impact across service industries is not homogeneous (Kochhar and Barroso, 2020). We suggest that industry type is shaped by three factors that determine if an organization in that industry adopts service continuity or hibernation: level of demand, level of contact intensity, and level of propensity for technology in a specific industry. While in many cases, individual service organizations cannot change or affect these industry-related factors, being aware of their impact on employee wellbeing could motivate firms to be better prepared for similar incidents in the future.

The *level of demand* indicates how much COVID-19 and social distancing practices have dampened the demand for service industries, resulting in an underutilization of resources, including employees, and creating an overcapacity problem. It is now widely evidenced that the pandemic has led to major spatial and temporal shifts in consumption (Hall *et al.*, in press). Therefore, many companies will either struggle to continue their businesses or hibernate their operations. In terms of the level of demand, some of the hardest-hit industries include airlines, hotels, restaurants and retailing—all of which have seen dramatic drops in their revenues since the pandemic hit, creating a major business hardship that has led to many employees being furloughed or laid off (Goldberg, 2020). Understandably, employees suffer not only in terms of

their financial wellbeing but also in terms of their mental wellbeing due to increased levels of stress and anxiety (Gowan, 2012).

Conversely, while the need for some services has drastically fallen, demand for others like health care or online shopping has grown exponentially. For employees in those industries, while the possibility of job losses and financial hardships are not major factors affecting their overall wellbeing, the stress caused by increased working hours or the possibility of being infected during their work may negatively impact their physical and mental wellbeing. Furthermore, overworked and stressed employees are unable to complain about their situation or share their stress with others as they still have jobs while others have lost theirs, creating additional stress.

The *level of contact intensity* refers to how much service delivery relies on face-to-face and close physical interactions (Leibovici *et al.*, 2020a). Contact-intensive industries, like food services, hair stylists, education, and personal-care services, are likely to be hurt more by social distancing and yet face bigger challenges (Leibovici *et al.*, 2020b). Depending on their nature as essential or nonessential services, service organizations in contact-intensive industries will either struggle to keep their business going (probably with some modifications) or will shut down—at least temporarily—during this pandemic. The possibility of some employees keeping their jobs while others get laid off also negatively impacts the overall service climate and subsequently hurts employee wellbeing. Even if some organizations stay afloat, they may experience a drop in demand as consumers seek to avoid contagion. In the case of some contact-intensive essential services (e.g., health care or air travel), since employees cannot work remotely, they carry the risk of infection as they have to stay in the workplace to perform essential activities (Leibovici *et al.*, 2020a). Service organizations, therefore, will need to adapt to social distancing, minimize infection risk, and safeguard employee wellbeing by adjusting working conditions (Dore *et al.*, 2020).

The third factor is the *level of propensity of technology*, denoting whether services can be delivered via different forms of technology. For example, many education services have switched to online delivery to avoid social proximity between teachers and students. Similarly, many restaurants now offer their services via delivery apps, while online grocery shopping has skyrocketed due to social distancing practices (Perez, 2020). The pandemic has catalyzed service innovation as organizations are forced to look beyond their existing business strategies (Heinonen and Strandvik, in press).

The different combinations of these three factors create different types of industries that enable service organizations to adopt a service continuity or hibernation strategy. Moreover, the type of industry has implications for different dimensions of employee wellbeing. For example, teachers in higher education may not need to worry about losing their jobs as the demand for their industry stays stable, at least in the short-term, and even though teaching can be classified as contact-intensive, teachers can still continue to perform their jobs from home using technology to deliver their lectures remotely. However, while their physical, financial, and mental wellbeing may not be negatively affected, social wellbeing may become an issue due to minimal/no social contact with colleagues and students. On the other hand, employees in the restaurant industry face different challenges—while some employees like waiters may lose their jobs, kitchen or delivery staff may stay employed due to the focus on take-out/delivery service models. In such cases, while financial wellbeing becomes a major issue for the former group, physical wellbeing becomes a dominant wellbeing dimension for the latter.

### *3.3. Micro level: the influence of employee-related factors*

Similar to macro- and meso-level factors, different micro-level (individual-level) factors determine the specific wellbeing outcomes of social distancing for employees. This framework

includes three such factors: *skills* (i.e., abilities and knowledge), *support* (i.e., work, social), and *self* (i.e., personal factors).

The *skills* factor is an important individual factor that impacts employee wellbeing (Myer-Briggs, 2019). In order to achieve top performance, individuals need to have the required skills and experience for their specific roles. In the case of service continuity, especially in cases that require changing service delivery modes, employees' existing skill set and their potential to acquire new skills through training and upskilling to perform new roles would affect not only their employment opportunities but also their resulting financial and mental wellbeing. For example, many employees, like teachers or customer service representatives, had to switch to remote working in the wake of the pandemic. Therefore, their skills of using different online platforms and tools played a critical role in their ability to perform their jobs and duties. However, the necessity to learn new skills could create additional stress for some employees and thus negatively affect their job satisfaction and, subsequently, their wellbeing.

Similarly, the transferability of existing skills and the willingness to learn new skills have become critical for many employees, especially in service-hibernation cases. For example, some McDonald's employees who lost their jobs as many fast-food restaurants went into hibernation in Germany were employed by Aldi, a discounter chain that was overwhelmed by significantly increased consumer demand during the pandemic (Springer, 2020). Similarly, in some countries like Sweden and the UK, laid-off cabin crews were offered jobs in the health-care system because of their training in and knowledge of performing CPR (Wade and Bjerkan, 2020).

*Support* has been recognized as another individual factor that may impact employee wellbeing (Guidetti *et al.*, 2018; Pfeffer, 2018). Such support may involve [implementing safety signals that the workplace is safe \(Bove and Benoit, in press\)](#) or having access to necessary resources like technology or a reliable internet connection required for someone to work

remotely. Furthermore, support also involves social support, including family, friends, and coworkers. For example, the type of leadership that a service employee receives from managers would affect his/her work performance during a pandemic (Bartsch *et al.*, in press). While such support is obviously important for social wellbeing, the evidence suggests that it improves happiness, which, in turn, helps boost physical health and wellness (Freeborne, 2020).

Additionally, researchers have recognized that social support also contributes to mental health. For example, empathy and shared responsibility encompassed by social support help employees overcome the stress that social distancing has created (Abel and McQueen, 2020). Even emotional and social support provided by companion robots could help individuals with their loneliness and eventual wellbeing (Odekerken-Schröder *et al.*, in press). Finally, social support could provide financial resources during a pandemic, especially for those employees who lose their jobs and, thus, at least in the short term, offers relief in terms of financial wellbeing.

Finally, *self* can be an important individual factor that affects employees' wellbeing as it may determine how individuals respond to the additional stress created by social distancing measures (Hogan, 2007). Self includes socio-demographic factors (e.g., gender, age, income level, family situation, etc.), the individual's personality and personality traits, personal hygiene practices, and life events. *Personality traits* affect how a person copes with the anxiety and social distancing created by this pandemic (Wynn, 2020). For example, engaging in social distancing could be easier for some people than others depending on their level of extroversion and conscientiousness (Carvalho *et al.*, 2020). For many employees in industries with a high risk of job loss due to service hibernation, the level of stress regarding being unemployed can be accentuated for some due to their personality traits (Dumitru and Cozman, 2012). In the case of service continuity, those employees in essential service sectors now work longer hours than before, creating different types of stress for those employees. Therefore, job security and

uncertainty about finances, workplace safety concerns, disruptions to daily life, health risks, and isolation from social life are creating unprecedented levels of employee stress. Employees' personality traits affect how equipped they are to handle such high levels of stress and thus have a direct effect on their wellbeing.

In addition, the circumstances created by the pandemic and social distancing practices have enabled a 'dark side' to emerge for many (Curphy and Nilsen, 2020). Such dark-side traits are defined as counterproductive behavioral tendencies that come out during times of high stress and are essentially coping mechanisms people use to manage these situations (Hogan, 2007). Individuals with such traits are more likely to demonstrate dysfunctional behaviors (e.g., avoiding making decisions or treating others around them differently when stressed) (Hogan, 2007). This pandemic has greatly increased the odds that employees will exhibit the dysfunctional behaviors associated with dark-side personality traits (Curphy and Nilsen, 2020). Undoubtedly, such dysfunctional behavior not only affects the way those employees cope with their own stress—thus affecting their mental wellbeing—but also further damages their social interactions and social wellbeing.

#### **4. Research themes and agenda**

Based on the framework, we propose two broad research themes across three levels of a service ecosystem that future service research may address. The first theme is of a *reactive* nature (short-term-oriented) and covers questions about what needs to be done to protect and support employee wellbeing during a pandemic. The second theme is more *proactive* in nature (long-term-oriented) and includes questions about how service organizations and employees can be better prepared for future pandemics to make sure that their negative impact on employee wellbeing will be minimal. Studying research questions developed around these themes would require interdisciplinary and multi-stakeholder approaches as the questions are complicated and



involve multiple actors at different levels in a service ecosystem. Table 2 presents some exemplary research questions for each theme across three levels.

(Insert Table 2 here)

## **5. Conclusion**

Undoubtedly, the COVID-19 pandemic has led to a major global humanitarian and economic crisis, creating service mega-disruptions. While social distancing aims to slow the transmission of the virus and help with public health, it has devastating implications for service employees and their wellbeing. This paper suggests there is a need for a holistic examination of various macro, meso, and micro factors to fully understand the impact of this pandemic on employee wellbeing. The research questions could be a starting point for future efforts to not only provide support for employees in this pandemic but also to make sure that necessary actions will be taken to prevent such a destructive impact on employee wellbeing in future pandemics. Furthermore, the framework could be adopted in other crises created by natural disasters (e.g., earthquakes, hurricanes), civil and political unrest, and global financial problems to understand their impact on employee wellbeing. Depending on the size and scope of such crises, while the individual factors included may change, the need to have an ecosystem-based approach to fully understand the impact of those crises on employee wellbeing would remain the same.

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**Table 1:** Dimensions of employee wellbeing

<b>Dimension</b>	<b>Description</b>
Physical wellbeing	<ul style="list-style-type: none"><li>• The ability to improve the functioning of one’s body (Strout and Howard, 2012).</li><li>• Includes physical strength and fitness, physical activity, weight, and sleep.</li><li>• Physical wellbeing is viewed as critical to overall wellbeing (Centers for Disease Control and Prevention, 2020).</li></ul>
Mental wellbeing	<ul style="list-style-type: none"><li>• A positive state of psychological and emotional health, in which a person “realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community” (World Health Organization, 2004).</li></ul>
Social wellbeing	<ul style="list-style-type: none"><li>• The ability to communicate, develop meaningful relationships with others, and maintain a support network (Strout and Howard, 2012).</li></ul>
Financial wellbeing	<ul style="list-style-type: none"><li>• The ability to sustain one’s current and anticipated desired living standards and financial freedom (Brüggen <i>et al.</i>, 2017).</li><li>• Feeling safe about one’s current and future financial state (Netemeyer <i>et al.</i>, 2017).</li></ul>

**Table 2:** Research themes and questions

	<b>Reactive nature (short-term oriented)</b>	<b>Proactive nature (long-term oriented)</b>
<b>Macro factors</b>		
<i>Public health</i>	<ul style="list-style-type: none"> <li>• How does the requirement for self-quarantine (e.g., for employees tested positive with COVID-19) affect a person’s employment?</li> <li>• What are challenges to reduce the negative impact of isolation on employee’s mental wellbeing, and how can public policies provide strategies to cope with COVID-19?</li> <li>• How can governments increase the efficiency and effectiveness of contact tracing? How can mobile apps be used to improve contact tracing?</li> <li>• How do cultural differences across countries influence the public health responses and effectiveness of containing the pandemic?</li> </ul>	<ul style="list-style-type: none"> <li>• How should governments implement quarantine measures to reduce employee’s anxieties and mental stress?</li> <li>• What long-term-oriented public health policies can be designed to minimize the negative impact of similar incidents on employee wellbeing in the future?</li> <li>• What are the long-term implications of increased government surveillance on consumer behavior?</li> <li>• What is the impact of social distancing on smart services and smart city planning?</li> </ul>
<i>Economic</i>	<ul style="list-style-type: none"> <li>• What type of economic stimulus package is most effective to limit the human and economic impact of COVID-19?</li> <li>• How do a country’s political system and ideology shape its government’s fiscal and monetary response to a pandemic?</li> </ul>	<ul style="list-style-type: none"> <li>• What interventions can governments implement to generate resources for future stimulus packages to support employees?</li> <li>• How will global fiscal support measures impact inequality across nations?</li> </ul>
<i>Legal</i>	<ul style="list-style-type: none"> <li>• What criteria can be used to effectively define essential and nonessential businesses/services?</li> </ul>	<ul style="list-style-type: none"> <li>• How will existing essential vs. nonessential business classification change in the future with new technology?</li> </ul>
<b>Meso factors</b>		
<i>Level of demand</i>	<ul style="list-style-type: none"> <li>• How can service firms reallocate their human and financial resources in the case of unexpected demand shocks?</li> </ul>	<ul style="list-style-type: none"> <li>• How can service firms plan for capacity adjustments in a future pandemic?</li> </ul>
<i>Contact intensity</i>	<ul style="list-style-type: none"> <li>• How can service firms redesign their delivery methods to allow for service continuity while adhering to social distancing?</li> <li>• How can service firms reduce fears and anxieties of frontline personnel to contract the virus in contact-intensive industries?</li> </ul>	<ul style="list-style-type: none"> <li>• What technology-based alternative service delivery options would service firms consider to reduce contact intensity in a future pandemic?</li> </ul>
<i>Technology</i>	<ul style="list-style-type: none"> <li>• What are the essential technological capabilities for a service firm to continue its operations?</li> <li>• How can service firms adopt automation, self-service technologies, and service robots to support their operations?</li> </ul>	<ul style="list-style-type: none"> <li>• What technological infrastructure and innovations do a service firm consider to adopt to better support employees in the future?</li> <li>• What is the role of cyber hygiene as more employees transition to work-from-home?</li> </ul>
<b>Micro factors</b>		
<i>Skills and support</i>	<ul style="list-style-type: none"> <li>• What resources can be provided to employees to adjust their skills and knowledge to newly performed tasks within the same organization as required by service continuity?</li> <li>• How can social support be provided in the workplace between teleworkers, office-based colleagues, and supervisors?</li> </ul>	<ul style="list-style-type: none"> <li>• What additional skill and knowledge-based training are required to better prepare employees for other related tasks and jobs in a future pandemic?</li> <li>• What specific wellness programs can be offered to employees to better prepare them to deal with a future pandemic?</li> </ul>
<i>Personal factors</i>	<ul style="list-style-type: none"> <li>• What personality traits help employees cope with the stress created by COVID-19, or the stigma of being tested positive?</li> <li>• How do work-from-home employees manage the challenge of balancing working hours with personal rest versus other isolation duties (e.g., homeschooling), and how does this affect their work performance?</li> </ul>	<ul style="list-style-type: none"> <li>• How can the negative impact of social distancing on perceived loneliness be mitigated?</li> <li>• What are the long-term effects of the pandemic for health workers who are exposed to traumatic experiences on a day-to-day basis?</li> </ul>

**Figure 1: Conceptual framework**

