

# CONSIDERATIONS ON TELEWORKING BEFORE AND DURING THE COVID-19 PANDEMIC

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**Abstract:** This paper extends the literature on teleworking before and during COVID-19, by exploring the existing variants and definitions on telework. A general conceptual framework of telework analysis based on Baruch and Nigel's (2001) four factors of teleworking is addressed, promoting the need for a shift of the research focus on understanding how to maximize the benefits out of remote working, leaving the question of whether or not to implement telework, as a topic of the past. Moreover, this study confirms the importance of individual (i.e. home/family and job related) factors for the successful adjustment to telework during COVID-19, pointing out that an adequate telework environment is a key factor that leads to positive work outcomes. In this context, the extent of telecommuting is also addressed. In conclusion, this study brings into light possible factors which influence the coping mechanisms of teleworkers during a pandemic.

**Keywords:** telework, telecommuting, remote working, COVID-19 pandemic, telework environment.

## 1 INTRODUCTION

The occurrence of exceptional circumstances, that affect the way people live and work, and societies conduct themselves (e.g., Kramer & Kramer, 2020; Trougakos, et al., (2020)), is of paramount importance in filling at least one considerable research gap in the telework paradigm, which "might lack contextual relevance in the current COVID-19 crisis" (Gajendran & Harrison, 2007).

Scholars from all over the globe can finally agree on one thing without doubt: COVID-19 has generated, and still does, complex and multivalent changes both on personal and social

level (Kniffin, et al., 2020). Individuals across the globe have developed proactive policies and solutions in order to minimize the damage ought to happen due to the COVID-19 pandemic (Mahasinghe, et al., 2021). In addition to lockdown and other control strategies imposed on governmental level, the major challenge in the labor markets was the "forced adoption of teleworking" (Tokarchuk, et al., 2021). As a result, organizations had to (re)organize their business activities around teleworking; stressing out the proportion of this phenomenon Belzunegui-Eraso & Erro-Garcés (2020) report, analyzing 27 organizations that introduced teleworking massively in the first half of March 2020, a

general lack of contingency plans for work reorganization, during emergency situations such as a pandemic. Novel research on telework in a pandemic context showed that, if a perception of greater workload is present, then increased productivity, job satisfaction and work quality are to be expected (Carillo, et al., 2020).

It seems that telework has been considered in the past, as an opportunity for high-skilled workers with high degrees of autonomy (Eurofound, 2021), more common among self-employed workers, such as ICT or business professionals (Milasi, et al., 2021), and originating from “a predominantly male professional segment and a largely female clerical segment” (Bailey & Kurland, 2002, p. 387). Milasi et al. (2021) summarize in their OECD report, a rather constant share (5.4%) of teleworkers in EU’s organizations in the past decade, but an increasing share (from 5.2% in 2009 to 9% in 2019) of the frequency in working from their homes. Be that as it may, the implementation or adoption of telework in organizations could be considered “an essential practice for contemporary business continuity” (Martin & MacDonnell, 2012, p. 612) or, if not a matter of life and death, at least a means of achieving several goals within the organization such as “promoting business effectiveness, supporting employees’ well-being at both work and home” (Greer & Payne, 2014, p. 88).

## 2 CONCEPTUAL BACKGROUND OF TELEWORK

### 2.1 *Considerations on existing variants*

The concept of working outside the conventional workplace through the use of Information and Communication Technologies (ICTs) has been theorized with a keen academic dissonance over the past five decades. Within this context, scholars raise awareness on this type of alternative work arrangement from a somewhat blurring perspective, at least due to:

(1) the lack of a commonly accepted definition (Baruch, (2001); Belzunegui-Eraso & Erro-Garcés, (2020); Carillo, et al., (2020)) and (2) the (im)possibility of comparing studies with uneven conceptualization (Bailey & Kurland, (2002); Allen, et al., (2015); Wang, et al., (2021)).

Arguing upon the types of study designs and samples that use identical label, but differ in the definition, and also mentioning a “disjointed literature stemming from multiple disciplines”, Allen, et al. (2015, p. 42) embark on an elucidating literature review on telecommuting types and definitional challenges. The scholars present a sample of telecommuting definitions from a time span of twenty years, and relate to the term telework, as a broader form of telecommuting, that encompasses work activities outside the central office, and used frequently in the literature of European and Australian outlets. Gajendran & Harrison (2007) express a rather critical point of view on the telecommuting research, considering the last twenty years of studies, “a common refrain in reviews unable to draw consistent conclusions about its most basic consequences”. From a slightly different viewpoint, Kniffin et al. (2020) condition prior findings to be difficult to generalize, when speaking about a mandatory character of the remote work.

Some scholars embrace a broader view on telework and welcome, without discrimination, the plethora of its variations, like telecommuting, remote working, distributed work, flexible work arrangements, or working from home (Bailey & Kurland, (2002); Kossek, et al., (2006); Gajendran & Harrison, (2007); Greer & Payne, (2014); Tokarchuk, et al., (2021)). Building on this fact, Martin & MacDonnell (2012, p. 603) state even that the interchangeable use of telework and telecommuting is an “accepted practice in this area of research”.

## 2.2 Coining a conceptual framework

Although researchers have not agreed upon a common definition of telework, there is doubtlessly a conceptual prevalent overlap in the matter of the needed technology and locational constrains – anywhere but the workplace – for task fulfillment (e.g., Baruch Y. , (2001); Belzunegui-Eraso & Erro-Garcés, (2020); International Labor Organization, (2020); Nguyen, (2021)). In an alternative, but closely related, approach that subscribes to our endeavor to conceptually dissect telework, Carillo et al. (2020) observe two main dimensions in the literature: (1) the distance from the conventional workplace, and (2) the use of ICTs to work, with the second one, (2), generating two different standpoints in defining telework:

- Firstly, ICTs have the role of “keeping in touch, communicating with others, and accessing one’s professional activities, allowing distance from the workplace” with high recurrence on the terms remote work or telecommuting
- Secondly, ICTs are not only means of communication but also characterize a strategic leverage of work redesign, with high accent of the usage of the terms telework or virtual work (Carillo, et al., 2020, p. 72).

For the purposes of this paper and following the extensive range of the two most common terminologies in the literature (Nguyen, 2021), telework and telecommuting, we align with Baruch’s (2001), Harris’s (2003), Gajendran & Harrison’s (2007) and Allen’s et al. (2015) views that speak of *a work arrangement that involves members of an organization, that perform all or a substantial part of their paid or unpaid work, away from the organisation’s locations – principally from home – using ICTs as needed, to conduct work tasks.* This specifically includes the category of knowledge workers who typically substitute a portion of their usual work hours – ranging from a few hours per week to full time – as the reported sample from our study.

## 2.3 (Re)views on effectiveness of telework

Taking into consideration Allen’s et al. (2015) recommendations for telework research, who state that a multifaceted approach is needed, which has to encompass aspects of the employee, of the job and the organization, but also drawing on important meta-analysis on telework from the past two decades (Baruch, (2001); Gajendran & Harrison, (2007); Martin & MacDonnel (2012); Kniffin, et al., (2020)), Baruch and Nigel’s design of four factors of teleworking (Baruch & Nicholson, 1997) is at least a valid starting and view point regarding future endeavors of investigating the effectiveness of telework. In their attempt to encompass the conditions that have to be met in order to reach an effective teleworking activity and assessing the suitability for companies which adopt telework in the daily routine, Baruch & Nicholson (1997) propose four factors that “need to be present simultaneously” in the process:

- The job (1) – the work design with its implied usage need for technology. While there are a number of benefits associated with telework, it is without doubt that not all jobs or all tasks are suitable for such a work arrangement.
- The organization (2) – including the degree of the supportive nature of the organizational culture to home-working arrangements, including the trust issue between management and teleworkers. For organizations that promote telework arrangements, organizational support (the supervisor’s acceptance and administration of the work arrangements, the facilitation of the suited technological requirements) is needed for them to be effective.
- The home/work interface (3) with its implied family relations, physical space and facilities available to meet the expected degree of task fulfillment. Research (Allen, et al., 2015) has pointed

out that productivity and personal life are two main reasons for one's decision to telework, but on the other hand, partners may fail to determine the boundaries between work and other domestic tasks, thus making them more permeable.

- The individuals (4) – with their attitude towards teleworking and psychosocial profile. Issues of social and professional isolation may arise, given that teleworkers are by definition, away from the workplace.

The above discussed factors are represented in following figure.

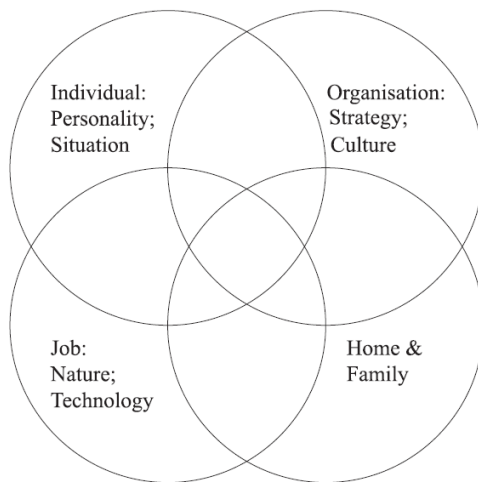


Figure 1: Baruch and Nigel's four factors of teleworking.

Source: Baruch, 2001, p. 117.

Baruch (2001, p. 118) observes, in a somewhat pragmatic manner, that since all these four factors matter in an essential way for the adoption of telework, and forecasting upon ones reasons to implement or agree to this type of work arrangement, that “only a strong external input, for example the possible catastrophic option of energy or transportation crisis” can accelerate teleworking.

Arguing that employees “have had to be largely self-reliant in their efforts to overcome

challenges” at the workplace and on some extent, combining the above mentioned factors (2) and (4), Chang et al. (2021) focus their study on how an employee can contribute through its personal resources to a desirable level of work productivity during a crisis. Thus, the needed organizational support is being provided, with the goal of “increasing the affected individuals’ personal resources” (Chang, et al., 2021) and the outcome which implies proactive coping during the circumstantially imposed teleworking. In an alternative, but closely related, approach that subscribes to a large extent to Baruch & Nicholson’s (1997) factors of teleworking, Harris (2003) explores: the physical environment, productivity, balancing home and work life, socialization, communication, tools and general issues. A somewhat surprising conclusion upon the employees, for the analyzed organization at least, was rather the challenge of accommodating work in the domestic environment, then the issue of self-managing their working time.

Previous research on the benefits of telework, has focused on searching for outcomes of interest both to organizations, such as productivity, retention, organizational commitment, and performance (Martin & MacDonnell, 2012) and to individuals, such as job satisfaction, performance, turnover intention, role stress or perceived career prospects (Gajendran & Harrison, (2007); Golden & Veiga (2005); (Greer & Payne, (2014)).

In their meta-analysis, Martin & MacDonnell (2012) find a positive relationship between telework and performance and productivity. In their moderator analysis, the scholars find that organizational commitment is more positive for younger samples if telework is an option.

Another meta-analysis of 28 primary studies (Gajendran & Harrison, 2007), reports that telework is positively associated with satisfaction while work-family conflict seems to partially mediate between telecommuting status and job satisfaction. Upon the telework’s effects on work-

family interface, Gajendran & Harrison (2007), conclude that empirical evidence in resolving this debate still remain inconclusive. The scholars find in addition, that telecommuting use is positively associated with supervisor-rated or objectively measured job performance. Golden & Veiga (2005) on the other hand, suggest that not all frequencies of telecommuting relate similarly to job satisfaction, observing that a satisfaction plateau is reached at around 15.1 hours per week telework. Thus, gains in job satisfaction at lower levels of telework are substantial compared with those at higher intensities.

Some downsides of telework are presented by the International Labor Organization (2020), such as longer working hours and additional work during the evenings and the weekends, especially for those members of an organization who have children or other dependents. Golden & Veiga (2005) suggest that the increased isolation and decreased social interactions, especially face-to-face, extent the risk of frustration and generate a toll on job satisfaction.

When discussing the extent or the frequency of telecommuting (or telework), Allen, et al. (2015) note that few studies have taken the issue of telework intensity into analysis. The scholars consider that differences in the time spent away from the central office, most likely generate different experiences and altered work outcomes. For instance, Golden & Veiga, (2005) find a curvilinear inverted U-shaped relationship between the extent of telecommuting and job satisfaction concluding that gains in job satisfaction at lower levels of telecommuting are relatively substantial compared with those at higher levels. In another study, extensive practitioners of telework, report high levels of job satisfaction and job performance (Golden & Veiga, 2008). Wang et al. (2021) share the same opinion, addressing the possibility of large differences in individual outcomes between extensive teleworkers and the ones who do it infrequently; the scholars express an interesting

viewpoint on the outcomes of previous research, which could say "more about the people who choose flexible working than it does about the real experience of working from home" (Wang, et al., 2021, p. 31). Golden & Eddleston, (2020) share the same line of thought about the interplay between the extent of telecommuting and additional factors in the work context, which could be a novel ground for future research. Thus, existing knowledge on telework has mostly been generated in the context of a voluntary (Harris, (2003); Golden, (2006); Greer & Payne, (2014)) or occasional (Golden & Veiga, (2005); Kossek, et al., (2006); Raghuram, et al., (2003)) work arrangement.

Moreover, Harris' (2003) qualitative approach on the experiences of a team and their line managers of teleworking during one year, revealed that the perceptions about full-scale home-based working require further and closer examination. Thus, Wang et al. (2021) stress out the need for a shift of the research focus on understanding how to maximize the benefits out of remote working, leaving the question of whether or not to implement telework, as a post-pandemic topic. In the same spirit, Chang et al. (2021) emphasize that the adjustment to modified work arrangements is one possible proactive response to a pandemic.

### 3 CONCLUSIONS

The present study extends the literature on teleworking before and during COVID-19, by exploring the existing variants and definitions on telework, developing a proposal of a general conceptual framework of telework analysis. The framework is based on Baruch and Nigel's (2001) four factors of teleworking and is consistent with Carillo et al.'s (2020) and Wang et al.'s (2020) findings on work performance during COVID-19 and adjustment to telework.

We promote, as a result of our literature review and congruent with Wang et al. (2021), the need of focusing future research on quantifying

the benefits of telework because at the present, more than ever, the question about reaching organizational effectiveness through telework, does not start with "If" but with "How".

More so, this study confirms the importance of individual (i.e. home/family and job related) factors for the successful adjustment to telework during COVID-19, pointing out that an adequate telework environment is a key factor that leads to positive work outcomes. In this context, the extent of telecommuting is also addressed.

In conclusion, this study brings into light possible factors which influence the coping mechanisms of teleworkers during a pandemic.

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