UNDERSTANDING THE RELATIONSHIP BETWEEN REMOTE-WORKING EMPLOYEES’ WELL-BEING AND JOB-EFFECTIVENESS DURING THE COVID-19 PANDEMIC

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While extensive research has been done to understand the relationship between employees’ well-being and job-effectiveness, the research is limited and inconclusive for a remote-working context. This mixed-methods study investigates the unique context of COVID-19-induced remote working to understand that relationship and its influencing factors, and help shape remote working in the future. The research was carried out at a medium-size, not-for-profit organization, using a subjective assessment for measuring employees’ job-effectiveness and four sub-variables to measure their well-being: job satisfaction, stress level, work-life balance, and general health. The study finds a positive correlation between employees’ well-being and job-effectiveness; however, the results indicate a stronger correlation for decline in well-being and job-effectiveness. It identifies three types of factors which have impacted the employees’ well-being and job-effectiveness while working remotely during the COVID-19 pandemic: organizational (organizational support and preparedness, communication, and job type), external (caring responsibilities, lack of social interaction, closed activities, and travel restrictions) and individual (personality traits, lack of commute, healthy habits, career stage / skill level, home-working environment, and time-planning flexibility and control). The study proposes a set of recommendations for practitioners in relation to remote working, including adopting a flexible approach that allows for individual differences.
INTRODUCTION

The demand for and adoption of flexible and remote working have been steadily rising over the last decade (Figure 1), but COVID-19 has accelerated the trend in a way that no one could have predicted. Since the World Health Organization (WHO) declared the outbreak of COVID-19 as a global pandemic on 31 January 2020 (WHO, 2020), the virus has spread rapidly. In response, governments worldwide implemented a range of measures, including travel restrictions, social-distancing measures, and closure of schools, entertainment, hospitality, non-essential business activities, and indoor premises (IMF, no date). The shelter-in-place orders left most of the workforce unable to work from offices, consequently leading every three in four businesses to switch overnight to remote working to safeguard employees and ensure business continuity (Forbes, 2020c). Before the pandemic, the conventional wisdom had been that offices were critical to productivity and culture (Boland, de Smet, Patter, & Sanghvi, 2020). However, the enforced remote working presented an opportunity for researchers and practitioners to learn from this experiment and shape the future of remote working.

Furthermore, research from Gartner (2020, cited in Forbes, 2020a) reports that nearly three quarters (74%) of Chief Financial Officers (CFOs) expect to transition a proportion of previously on-site employees to remote working permanently in the aftermath of COVID-19. The transition is primarily driven by the reports of improved employee productivity (BCG Global, 2020; Forbes, 2020b; Maurer, 2020) and prospective cost savings for businesses due to reduced fixed overheads (e.g., commercial real estate costs) (Forbes, 2020a). Nevertheless, the implementation of remote working goes much broader and deeper than a quick reaction to such results, especially when some of the preliminary studies have highlighted possible risks to remote workers’ well-being (Carnevale & Hatak, 2020; University of Exeter, 2020). Therefore, a structured approach, founded
upon the understanding of remote working’s impact on employee well-being and job-effectiveness, is required in order to be successful in the long term.

The existing literature might also lack contextual relevance to remote working during the COVID-19 crisis. Pre-COVID-19, remote working was a choice rather than a necessity for employees, and was only practised by those who preferred it. Thus, the existing literature is likely to be influenced by the disparities between those who regularly worked remotely and those who did it infrequently (Wang, Liu, Qian, & Parker, 2021). Moreover, the current form of remote working brought together additional stressors such as job insecurity due to the economic downturn, health and safety concerns, and children/elderly caring responsibilities (University of Exeter, 2020). The presence of such factors makes the current form of remote working very different from typical remote working. Therefore, to fill the literature gap, new research is required to understand the impact of remote working on employee well-being and job-effectiveness in the current context.

Finally, the field of research analysing the relationship between employee well-being and job-effectiveness has been an area of interest among researchers for a long time (Fisher, 2003; Baptiste, 2008; Marsden & Moriconi, 2009; Krekel, Ward, & de Neve, 2019; Bryson, Forth, & Stokes, 2014). Still, empirical evidence on establishing a similar relationship in the remote-working context remains limited and inconclusive (Bosua, Gloet, Kurnia, Mendoza, & Yong, 2012; Menezes & Kelliher, 2011; Charalampous, Grant, Tramontano, & Michailidis, 2019) and needs further research.

To address the above points, this research aims to understand the relationship between employee well-being and job-effectiveness while working remotely during the pandemic. In doing so, the research is guided by the following main research question (Figure 2):
• What is the impact of remote working on the relationship between employee well-being and job-effectiveness during the COVID-19 pandemic?

See Figure 2

It is guided also by the following sub-questions:

• What are the factors influencing employee well-being and job-effectiveness in the current context?

• What are the recommendations for practitioners to get the most out of remote working in the long term?

Therefore, the study is valuable for scholars, to continue the theoretical development of the association between employee well-being and job-effectiveness in the remote-working context, and for practitioners, to incorporate and manage remote-working attitudes and policies more effectively.

The research was carried out at GÉANT, a medium-size not-for-profit membership organization, using a mixed-methods approach. The organization had remote-work readiness at a moderate level and allowed employees to work from home for up to two days a week prior to COVID-19. The study setting (see the Methodology section) makes an interesting case to understand the impact of COVID-19-induced remote working on employees who already had the flexibility to work remotely. Thus, the extent of novelty experienced due to the current circumstances might have been different from those who worked in traditional workplace settings.

To provide a framework for studying remote working in the current context, this paper is structured as follows: the next section covers key terms and definitions used within the paper, and reviews the theoretical as well as empirical literature on employee well-being and job-effectiveness in the traditional workplace, remote working and the COVID-19 context. The
Methodology section talks about the approach, including the setting, data collection and analyses, used for this study. The Findings section presents the results, followed by further consideration of original findings relating to organizational, external and individual factors in Discussion, leading to Recommendations. After highlighting the limitations of this analysis and offering an outlook on possible potential trends and attractive research prospects in the area, the paper’s final section presents the conclusion.

**LITERATURE REVIEW**

The literature review first establishes an understanding of the key terms in relation to the current study, such as remote working, well-being, and job-effectiveness. Then it explores broadly the relationship between employee well-being and job-effectiveness, followed by studies exploring a similar relationship in a remote-working context. It was observed that the available literature analysing the direct relationship between well-being and job-effectiveness in the remote-working context is limited. As an alternative, the literature studying the impact of remote working on well-being and job-effectiveness independently of each other is reviewed. Next, the section discusses employee well-being and job-effectiveness specifically in the context of the COVID-19-induced shift to remote work, before concluding with a literature review summary and highlighting the research gap.

**Key Terms and Definitions**

**Remote working.** Grant, Wallace and Spurgeon (2013: 3) defined “remote e-working” as a broader term relating to “work being completed anywhere and at any time regardless of location and to the widening use of technology to aid flexible working practices”. Another frequently used term is “work from home” (WFH), where workers perform their work-related tasks from their home.
The terms “remote e-working” and “remote working” are frequently used interchangeably. For the purpose of this research, the term “remote working” has been used, as it fits well with the job type of the participants who volunteered for the study. They worked from home, different company sites, hotels, and airports before the pandemic but mainly from home during the pandemic. Due to the nature of the work, the research participants are also often required to work with people in different time zones when the office is not open.

**Well-being.** In their theoretical review, Taris and Schaufeli (2015) highlighted that individual-level conceptualizations of well-being could be classified on two dimensions:

- Whether they focus exclusively on affective well-being, where conceptualization is simply the relative frequency of positive effects compared to negative effects, or employ a multidimensional approach (including not only affect, but also behaviour and motivation).
- Whether they are context-free (i.e. relate to general quality of life) or domain-specific (e.g., relate to work, school or intimate relationships) (cited in Charalampous et al., 2019).

The domain-specific and multidimensional conceptualization is preferable, as:

- A domain-specific phenomenon may provide a better understanding of the work-specific characteristics that influence employees’ well-being (Warr, 1994, cited in Charalampous et al., 2019; Taris & Schaufeli, 2015).
- Widespread empirical evidence supports well-being as a multidimensional notion (Charalampous et al., 2019).

Furthermore, van Horn et al. (2004, cited in Taris & Schaufeli, 2015) have defined the five correlated dimensions of work-related well-being (Table 1):
Based on the above literature review, work-related well-being measured across four sub-variables – job satisfaction, stress level, work-life balance, and general health – is used to conceptualize employees’ well-being for the current research.

**Job-effectiveness.** Westfall (2004, cited in Bosua et al., 2012) proposes four variables that need to be incorporated to quantify an individual’s performance: the amount of work, intensity of work, efficiency of work, and adjustments (e.g., additional organizational costs required to remote work). Another definition by Bosua et al. (2012) defines an individual’s productivity as a measure of how effectively and efficiently assigned tasks are completed over time. Taking the above definitions into account, the term “job-effectiveness” in this paper is defined as the ability to carry out day-to-day work, undertaking and completing tasks at sufficient levels of quality, on time, and fit for purpose to meet the organizational objectives.

Furthermore, it is complex to measure the job-effectiveness of individuals (Baker, Avery, & Crawford, 2007; Menezes & Kelliher, 2011; Bosua et al., 2012; Warr & Nielsen, 2018). The objective indicators of individual employees’ performance are rarely available due to the difficulty in quantifying an individual’s job activities and recording of output mostly at the department level rather than the individual level (Warr & Nielsen, 2018). Therefore, many researchers have investigated subjective assessments of performance – either ratings by managers, colleagues, customers, or self-reported by research participants themselves (Warr & Nielsen, 2018).

Moreover, it is not easy to quantify an individual’s job-effectiveness in a remote-working context as other considerations may influence them, such as social interactions with managers, team members or family members, as well as the organizational culture, situational resources,
distractions in a workplace, and general well-being (Baker et al., 2007; Menezes & Kelliher, 2011, cited in Bosua et al., 2012).

Due to the above complexities, subjective assessment (self-reported by the research participants) of job-effectiveness is used for this study.

**Relationship between Employee Well-Being and Job-Effectiveness**

Extensive evidence exists to support the association between employee well-being and job-effectiveness (Krekel et al., 2019; Bryson et al., 2014). A two-part comprehensive study from Krekel et al. (2019) reported its findings on the question, “is there a compelling business case for spending scarce resources to ensure and enhance well-being in the workplace”? The study looked at the relationship between well-being and productivity at the individual level, first by reviewing the empirical evidence from the academic literature, and second by conducting a meta-analysis of research studies done by Gallup. The research concluded that the evidence from the field and literature demonstrates that well-being is positively correlated with productivity.

A Royal Mail study conducted by the London School of Economics highlighted how investing in employees’ well-being can produce better returns for an organization (Marsden & Moriconi, 2009). Fisher’s study (2003) concluded that a happy worker is likely to be a productive worker. Baptiste (2008) also concluded that investing in employees’ well-being positively impacts their performance.

Based on the above review, the evidence indicates that there are measurable, objective benefits for employees’ job-effectiveness in traditional workplaces from ensuring and enhancing their well-being.
Employee Well-Being and Job-Effectiveness in the Remote-Working Context

In contrast to the strong evidence of a positive correlation between employee well-being and job-effectiveness in a traditional workplace, the literature on the remote-working context is minimal and inconclusive, as discussed below.

Bosua et al. (2012) concluded in their research paper that the ability to work remotely fosters individual well-being, which yields greater productivity. They identified four main aspects to ensure productivity in the context of remote working: a) the availability and use of adequate technology to enable remote working, b) the presence of trust between managers and remote workers, c) the need for remote workers to be self-driven and self-managing, and d) the requirement for a different approach to managing remote workers. From a well-being perspective, the study reported a heightened sense of well-being for the participants due to better work-life balance, reduced stress, and flexible work schedules.

A study by Bloom, Liang, Roberts and Ying (2013) reported a significant (13%) increase in performance from home-working. Home workers also reported substantially higher job satisfaction and psychological attitude scores, and their job attrition rates dropped by over 50%.

In contrast to the above studies, Noonan and Glass (2012) claimed that while telecommuting may increase employee productivity and employee retention and decrease absenteeism, it is not helpful in reducing work-family conflicts. Instead, telecommuting appears to have become instrumental in the general expansion of the work hours of remote workers, thus reducing their well-being.

Grant et al. (2013) also reported both positive and negative impacts of remote working on employee well-being and job-effectiveness. The research raised some clear implications for remote workers and their managers. The study highlighted that even though remote workers may be very skilled at their job, they still require additional support to be effective remote workers. The remote
workers may also experience psychological issues such as overwork, managing work and home boundaries, and increased stress levels.

**Employee well-being in the remote-working context.** Contrary to the previous section, although significant literature is available on the association between remote working and employee well-being, the findings are unanimous. The literature on individuals’ well-being presents both positive and negative aspects of remote working, as described below.

For instance, Wheatley (2017) reported that remote working has the potential to offer benefits to both employee and employer. The author identified studies that claim employers can benefit from a contented workforce, increased productivity, improved recruitment/retention, reduced absenteeism, and reduced accommodation costs (e.g., hot-desking) through remote working. Meanwhile employees can benefit from greater elasticity in both the location and timing of work, in some cases having the flexibility to decide work time according to their preferences (Tietze, Musson, & Scurry, 2009, cited in Wheatley, 2017). The author also reported that remote working could increase leisure time for employees; however, not necessarily for females due to their tendency to fill the extra available time with household chores (Wheatley, 2012).

Hoeven and Zoonen (2015) concluded that remote working is positively associated with employee well-being through enhanced work-life balance, job autonomy and effective communication, and negatively associated with employee well-being due to increased interruptions.

Notwithstanding the previous studies, related research studies in the area feature the pessimistic side of remote working in relation to employee well-being. For example, Kelliher and Anderson (2009) claimed that remote working leads to work intensification, which is associated with low levels of employee well-being (Pace, D’Urso, Zappulla, & Pace, 2021). The authors used an in-
depth qualitative approach to examine the experiences of flexible workers (including part-time workers). In relation to remote workers, they identified enabled instead of imposed work intensification, as remote workers could exert higher levels of intensive effort due to the lack of workplace distractions. Drawing on social exchange theory, the authors also identified a sense of obligation from employees where they reciprocate with additional effort, resulting in work intensification.

On a related theme, multi-method research by Eddleston and Mulki (2015) reported that working solely from home encourages remote workers to overwork and allow their work to infringe on their family role. The study highlighted that working from home creates unique challenges for remote workers because the work role becomes embedded in the family domain such that their home comes to be associated with the work role, and work physically and psychologically intrudes upon their family.

Menezes and Kelliher (2011) found, in their systematic review, studies reporting flexible working as a means of reducing stress as well as a source of stress, consequently impacting employee well-being in the respective direction. Hartig, Kylin and Johansson (2007) reported similar findings: that although remote working can reduce employees’ stress, blurred boundaries between work and home can reduce the restorative effects of home.

On a slightly different note, Kossek, Lautsch and Eaton (2006) established that flexibility is multi-faceted, and individual well-being is predicted by the psychological experience of flexibility: whether individuals perceive they have job control over when, where and how they work, and can choose to separate boundaries between work and family.

**Employee job effectiveness in remote-working context.** Menezes and Kelliher (2011) highlighted in their systematic literature review that there had been a significant advancement in
recent decades in literature exploring the relationship between flexible working and performance. Taken together, though, this literature does not explicitly show a unanimous business argument for giving staff choice over job arrangements. The study concluded that given the diversity in approaches to establishing the relationship between flexible working and performance, the literature is inconclusive. There is a need for greater clarity in this field of research.

On a related note, while research by Gallup (2020) indicated that remote workers are more productive than on-site workers due to enhanced work engagement, Hickman (2019) claimed that the lack of social interaction, manager communication, and peer-to-peer interactions could lead to employee workplace isolation. Consequently, it can negatively influence remote workers’ job performance. However, management acumen and organizational expertise to develop and implement effective remote-work policies can make a difference.

To summarize (Table 2), although there is undoubtedly a need for further clarity in the area (Menezes & Kelliher, 2011), yet there is sufficient evidence that with the right remote-working policies to shape organizational and job factors remote working can result in improved employee productivity (Bosua et al., 2012; Hickman, 2019).

See Table 2

**Empirical Context: Remote Working during COVID-19**

The COVID-19 pandemic has led to an unprecedented workplace experiment at a global level, where the majority of the workforce were forced overnight to work remotely. While some preliminary studies reported improved productivity (BCG Global, 2020; Maurer, 2020), others highlighted the risk to employees’ well-being due to blurring boundaries between work-life, workload, presenteeism, and inadequate technology (Carnevale & Hatak, 2020; University of Exeter, 2020).
For instance, Vaidya, Prasad and Mangipudi (2020), through their multiple regression analysis, identified occupational stress-causing factors such as workload, role ambiguity, organization climate, job satisfaction and physiological factors, which are significantly influencing the psychological well-being of employees in the information technology industry during the pandemic.

On a related note, the preliminary results from research by Exeter University (2020) reported that it is not only factors related to the work and home domain that are impacting employee well-being while working remotely during the current crisis. The study reported that the remote workers felt a decline in their well-being due to the anxiety caused by the economic impact of lockdown (increased job insecurity), the loneliness of working in a home environment, and increased demands to juggle work and domestic responsibilities due to closure of schools, etc.

McKinsey (2020) conducted a survey of US-based employees on a range of issues related to employee experience during the pandemic. The survey found that employees who work remotely see more positive effects on their everyday work, are more engaged and have a greater sense of well-being than those who work in non-remote jobs with less flexibility. The study also found that although all employees (remote and non-remote) are experiencing some degree of disruption, their range of experiences is wide.

Furthermore, the research by Carnevale and Hatak (2020) reported the implications COVID-19 has for human resource management (HRM) (e.g., altered work conditions, feeling of isolation and work-family conflicts) as organizations help their workforce cope with and adjust to their newly altered work environment.

In other related research, Vyas and Butakhieo (2021) analysed the impact of remote working during the pandemic on the work and life domain, using an exploratory framework and a strengths,
weaknesses, opportunities and threats (SWOT) analysis of the public sector in Hong Kong. The study reported that interest in WFH remains, but not in its current form: WFH has not proved successful for the majority of the Hong Kong workforce due to the lack of policies to conduct effective home working. This further highlights the need for a more structured approach to planning and implementing long-term remote working.

**Research Gap**

While there is strong evidence of a positive correlation between employee well-being and productivity in a traditional workplace setting, the literature is limited and inconclusive on the relationship between employee well-being and job-effectiveness in the remote-working context (Table 2). Although some common themes emerge from the literature, the findings are not consistent and further research is needed in the area.

Since the start of the pandemic, most of the workforce globally has been unable to work from offices due to government-imposed lockdowns to stop the spread of the virus. As a response, organizations around the world quickly switched to remote working to safeguard employees and ensure business continuity. Much research started to emerge within a short period to highlight the factors impacting the remote worker’s well-being (see Empirical Context: Remote Working during COVID-19). A couple of other research studies worked on identifying the characteristics and challenges of remote working during the pandemic. So far, however, none of the studies has looked at finding the relationship between employee well-being and job-effectiveness in the context of the COVID-19-induced shift to remote work (Figure 3).

As emphasized in the Introduction, the existing literature may also lack contextual relevance in the current COVID-19 crisis. For example, in their study, Kelliher and Anderson (2009) identified
a sense of obligation from employees where they reciprocate with additional effort. However, it is not relevant in the current context, since employees are forced to work remotely due to the pandemic instead of doing so by choice.

Additionally, as described by Wang et al. (2020), the existing literature (pre-COVID) has primarily been generated from a context in which remote working was only occasionally or infrequently practised and was only considered by some, but not all or most, of the employees within an organization. The differences between those who extensively worked remotely and those who did it infrequently were likely to affect research outcomes. Furthermore, the existing literature results might be influenced by selection bias (Lapierre, van Steenbergen, Peeters, & Kluwer, 2016, cited in Wang et al., 2020) due to the voluntary nature of pre-COVID-19 remote working.

Therefore, the previously identified factors impacting the relationship between employee well-being and job-effectiveness might be geared toward the opinions of those who were interested in or able to engage in remote working. In the current situation, when remote working is no longer a discretionary option but rather a necessity, there is a need to look at the relationship in a fresh light.

As highlighted by preliminary studies (see Empirical Context: Remote Working during COVID-19), the current form of remote working can pose a serious question for employees’ well-being. If left unanswered, it can threaten innovation, collaboration, communication, and productivity in the long term. Therefore, it is critical to understand the link between remote workers’ well-being and job-effectiveness in the current context and use the knowledge to create a more structured approach toward long-term remote-working policies.

Therefore, the current study aims to address the research gap as outlined above by exploring the relationship between as well as factors impacting employees’ well-being and job-effectiveness in the COVID-19-induced remote-working context.
METHODOLOGY

The study utilized a mixed-methods approach to explore and understand the employees’ experiences in relation to their well-being and job-effectiveness. The study employed the guidelines described by the Happy City Measurement and Policy (HCMP) Team (2016) in order to avoid the common pitfalls of qualitative research.

Study Setting

The study was carried out at a not-for-profit membership organisation, GÉANT. The organisation is a fundamental element of Europe’s e-infrastructure, delivering the pan-European GÉANT network for scientific excellence, research, education, and innovation (GÉANT, 2021a). Through its integrated catalogue of connectivity, collaboration, and identity services, GÉANT provides users with highly reliable, unconstrained access to computing, analysis, storage, applications, and other resources, to ensure that Europe remains at the forefront of research (GÉANT, 2021a).

Remote-work readiness pre-COVID-19. The organization has two offices: one in Amsterdam, Netherlands (40 employees), and the other in Cambridge, UK (98 employees) (GÉANT, 2021). In addition, two employees work remotely: one based in the UK and the other in Spain (GÉANT, 2021). Most teams have members distributed at both office locations, hence working with virtual team members is not new for GÉANT’s employees. The organization’s IT infrastructure was moderately equipped for remote working prior to the COVID-19 pandemic.

Related policies pre-COVID-19. The current home-working policy (GÉANT, 2020) allows employees to work from home for a maximum of 52 days in any six-month rolling period. Anything above that period requires employees to apply for special permission to do so from the HR team and the employee’s respective Executive Team member. Remote working outside of the Netherlands or the UK is not allowed due to the tax-related overheads for the organization.
Data Collection

The research data was collected using an anonymous online survey (created and managed with SurveyMonkey\(^1\)) and in-depth interviews with the research participants.

The structure of the questionnaire (Appendix A) was derived using the literature on well-being and job-effectiveness. As outlined in the Definitions section, the four variables job satisfaction, stress level, work-life balance, and general health were used to measure the employees’ well-being. For measuring job-effectiveness, a subjective assessment (self-reported by the research participants themselves) was used.

A structure similar to the survey questionnaire was used as the basis for the interviews; however, the responses were explored in much more depth. All interviews were conducted remotely via Zoom\(^2\) due to the national lockdown and travel restrictions. The interviews were recorded and transcribed using Zoom’s auto-transcript feature. A manual review of the transcriptions was carried out to ensure accuracy.

Any clarification regarding the questions was provided to the research participants on request via Slack\(^3\) (a communication platform), email or Zoom.

**Representative sample.** An email was sent to all staff members inviting them to volunteer for in-depth interviews or participate in the online questionnaire. In total, 22 in-depth interviews were conducted, and 38 employees completed the online survey. Data regarding demographics (age, gender) and other related aspects (job role, tenure, living situation, care responsibilities, and whether an ex-pat or not) was also collected from the volunteers. Figure 4 shows the size of different segments in the representative sample.

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\(^1\) [https://www.surveymonkey.co.uk](https://www.surveymonkey.co.uk)
\(^2\) [https://zoom.us/about](https://zoom.us/about)
\(^3\) [https://slack.com/intl/en-gb/about](https://slack.com/intl/en-gb/about)
The number of employees with an “Execs” job role, or in the “20–29” and “60 or above” age groups, or living with friends/flatmates is in general low in the organization.

See Figure 4

Data Analyses

Microsoft Excel and Tableau⁴ were used to analyse the participants’ rating of different variables and present them in a meaningful way.

Thematic analysis (HCMP, 2016) was used to examine the themes that emerged from the data collected. The themes and sub-themes (as described in the Findings section, Figure 9) were identified by looking for commonalities, relationships, and discrepancies. The process entailed reading and re-reading the transcripts and checking the codes to make sure they corresponded to the extracted themes. The emphasis was given to the factors influencing both employee well-being and job-effectiveness instead of just one of those variables.

FINDINGS

Before switching to full-time remote working during the pandemic, most research participants reported high well-being and high job-effectiveness with very few exceptions (Figure 5).

See Figure 5

After the switch, while most of the participants still reported high well-being and high job-effectiveness, based on retrospective ratings a slight left shift can be seen on the plot (Figure 6).

See Figure 6

⁴ https://www.tableau.com/en-gb
None of the employees rated their well-being “Extremely High” before switching to full-time remote working. However, after the switch, 4 employees rated their well-being as “Extremely High”. The number of employees who rated their job-effectiveness “Extremely High” stayed almost the same (13 before and 12 after) (Figure 7).

Before the switch, only 1 employee rated their job-effectiveness “Low.” However, after the switch, 4 rated their job-effectiveness “Low”/“Extremely Low,” 5 rated their well-being “Low”/“Extremely Low,” and only one rated both job-effectiveness and well-being “Low”/“Extremely Low” (Figure 8).

Analysing further by calculating the change in before and after ratings of each employee’s well-being and job-effectiveness (Table 3) shows that most of the participants who reported a decline in their well-being (n=30) have also experienced a decline in their job-effectiveness (n=19). In contrast, 9 experienced no change and 2 experienced improved job-effectiveness while working remotely during the pandemic.

Six out of 17 participants reported improved job-effectiveness along with their improved well-being, while 8 experienced no change, and 3 experienced a decline in their job-effectiveness. However, 2 participants (highlighted in blue text in Table 3) who reported no change in their job-effectiveness along with improved well-being had rated it at the highest level before and after switching to full-time remote working.
The results show a more consistent positive correlation between well-being and job-effectiveness before switching to full-time remote working than afterwards. Although there is still some evidence of a positive correlation between employees’ well-being and job-effectiveness, the results indicate a stronger correlation for decline in well-being and job-effectiveness.

Note: Appendices 2, 3, 4, 5 and 6 show the well-being and job-effectiveness results for different representative sample segments.

**Factors Impacting Well-Being and Job-Effectiveness**

The research participants highlighted various factors that contributed to the above results, which can be broadly categorized into three main themes: organizational factors, external factors, and individual factors. The following sections examine each of these factors in detail.

**Organizational factors.** The organizational factors encompass all those elements that are specific to and can be influenced by the organization. The following sub-themes concerning organizational factors emerged from the data analyses: organizational support, organizational preparedness, communication, and job type. Each sub-theme is considered below.

The *organizational support* provided during the COVID-19 pandemic was highlighted by several employees as a factor that positively impacted their well-being and job-effectiveness. Table 4 summarizes the organizational support initiatives cited by the employees in the interviews and the survey. These initiatives not only motivated the employees to give their best to achieve the organizational objectives but also helped to create trust in the organization, which led to improved job satisfaction (an integral component of employees’ well-being).

“The attitude of the employer has been pretty impactful. I think the work that was done shows real due diligence, care, and concern for employees.” (#49, 2020)

“I felt like the whole company worked as one entity and jointly powered through the difficult times.” (#13, 2020)
A few respondents reported that they were not given the flexibility to work from the office even though the government allowed it for essential work. The communications from the senior leadership team also encouraged working from home. Therefore, they felt a lack of support from the organization to perform their jobs effectively and consequently experienced reduced job satisfaction.

“The perception of GÉANT that all roles can be done remotely has been especially problematic for me. The scaremongering communications from GÉANT also fuelled a reluctance from other team members to return to the office after the first lockdown. There is also now a belief within the team that because others work from home, then it is unfair on them that their job requires them to be in the office.” (#36, 2020)

With regard to organizational preparedness, remote working was not a new thing for the organization. Most employees were accustomed to remote working and were well supported in terms of the technology required to perform their day-to-day job. The IT department was already set up to support employees who were traveling for business regularly or working remotely. Before switching to full-time remote working, the organization had most of the necessary tools in place, such as a business communication platform (Slack), videoconferencing system (Zoom), an online document management system (Box), and the ability to access internal resources through a Virtual Private Network (VPN), etc. This resulted in a seamless transition to full-time remote working for most employees, with a few exceptions, such as employees who did not prefer to work remotely before or staff members from the departments using paper-based processes.

“Our access to the relevant and fit-for-purpose technology helped me immensely in doing my job effectively. The transition for me was seamless.” (#44, 2020)

The data analyses found a strong correlation between an employee’s ability to perform their job effectively and job satisfaction, to which the organization’s technology readiness or lack thereof
contributed significantly. One of the staff members reported that they did not have a proper document workflow solution to fulfil the auditor’s requirements and had relied on paper-based processes in the past. The required changes and lack of appropriate online tools resulted in delivering the department objectives with significant delays and, in turn, lower job satisfaction.

“For me job satisfaction is very much linked to getting the stuff done on time.” (#43, 2020)

Conversely, several other employees who were able to perform their jobs effectively reported higher job satisfaction.

The research yielded communication as one of the key factors that impacted employees’ well-being and job-effectiveness.

A difference has been noticed in the mixture of fellow colleagues with whom an individual interacts on a day-to-day basis. Individuals are interacting more with colleagues whom they need to perform their job, rather than bumping into someone casually in the office corridor/kitchen and having short/ad hoc conversations. It seems to have impacted the employees’ visibility of other parts of the organization and casual knowledge transfer.

Most employees also mentioned that they miss watercooler moments, which acted as a stress buster and helped them to bond with their colleagues and sometimes to come up with great ideas.

The lack of opportunity to pick up non-verbal cues and instances of misinterpreting a written message/email have also contributed toward interpersonal issues among some of the employees, which contributed toward increased stress levels and reduced job satisfaction.

“I mentioned earlier the squabble with a colleague. Maybe that could have been avoided if we were face to face. When you’re only seeing each other on video chat or only sending very quick messages on Slack, then of course you can interpret things in a very different way, whereas if you were in person maybe things wouldn’t have turned out that way.” (#58, 2020)
The lack of face-to-face conversations has also resulted in an increased workload for some employees, and they felt overwhelmed by the number of messages and emails.

“The downside of not having people around is that you are no longer able to just turn around or get up and walk to someone to ask a question. For everything, you need to take an action. The result is, although the efficiency stayed at the same level, the workload has increased. You had to take more steps and actions to achieve the same result.” (#44, 2020)

On the positive side, the employees reported that the use of Slack as a communication tool was very effective in mitigating some of the down sides of communication in a remote-working environment. However, employees are not able to reap the full potential benefits from it due to the lack of company-wide acceptance.

“Slack channels are the nice part of it. Even if you don’t contribute to it, just seeing some of the chat going on gives you the feel of being part of the community/family.” (#57, 2020)

“I've used Slack a lot more since lockdown. I think the usefulness of Slack during lockdown for informal conversations and just general chat is fantastic. There are some people that don’t actually use Slack. I think that somehow they are missing out.” (#49, 2020)

With regard to job type, while the skilled/experienced individual contributors have flourished in remote working during the pandemic, most employees with managerial responsibility have reported a decline in their job-effectiveness due to not being able to be around their team members (Appendix D). For some, the decline in job-effectiveness has added to their stress levels and thus to reduced well-being levels.

“When you are around your team, you’re listening to what they are saying, you are kind of watching what they’re doing, you’re aware what’s going on, and you can interject quickly. It is so much easier to manage when you’re in the middle of it than when you’re outside of it.” (#50, 2020)
A few line managers also highlighted that the inability to meet in person impacted new-joiner onboarding and building a relationship with them.

“It’s not too bad maintaining relationships over Zoom, but it’s difficult to get them started.” (#45, 2020)

**External factors.** For the purpose of the research, external factors are defined as the elements outside of the organization’s/employees’ control that can influence employees’ well-being and job-effectiveness.

The pandemic prompted an unprecedented situation, and most of the workforce all around the world was compelled to work remotely. Unlike previous research studies in the area, external factors such as caring responsibilities, travel restrictions, and mental health significantly impacted the employees’ well-being and job-effectiveness.

The lockdown in the UK and the Netherlands has imposed many restrictions on the employees’ day-to-day life that has impacted them in very different ways. The following sub-themes emerged from the data analyses: caring responsibilities, lack of social interaction, closed activities, and travel restrictions.

With regard to *caring responsibilities*, the countrywide closure of schools/nurseries left many juggling with home schooling and work responsibilities at the same time. Many employees with caring responsibilities (n=9) rated a decline in both their well-being and job-effectiveness during the pandemic, while some (n=8) reported no change in their job-effectiveness but a decline in their well-being. The lack of clear boundaries between work and personal life was the most quoted reason for the decline. The employees with a single child or young children experienced it more than others.

“When my daughter was at home, I felt like I neither enjoyed my work nor family time as none of it was ever good enough.” (#13, 2020)
“Just thinking about it brings tears to my eyes. Lots of things came together and made the situation very challenging for me. It was really, really, really hard.” (#57, 2020)

Some employees (n=3) reported both positive well-being and positive job-effectiveness despite having caring responsibilities. The ability to manage both work and family obligations was the highlighted reason for it. These participants were either responsible for older children or elderly care.

“I have an 87-year-old mother who fortunately lives in the same village as myself. It has not impacted on work – in fact it has helped working from home, because if there is an issue, it is easier to pop around there for 10 minutes during the lunch break rather than doing a one-and-a-half-hour commute back from office.” (#41, 2020)

In terms of lack of social interaction, with social distancing rules, many employees were not able to meet their families and friends for months, which left them with a feeling of living on a deserted island. Not having the possibility of a social outlet impacted the employees’ stress level and mental health and consequently affected their ability to perform their job effectively.

“The whole situation has added to the emotional stress. The last 4 months have been extremely difficult for me and made it hard for me to perform effectively in my job.” (#48, 2020)

However, the employees who were living on their own were not the ones who were worst impacted in terms of well-being and job-effectiveness; in fact, some of them reported improved well-being and job-effectiveness (Appendix E).

A few employees also reported an improvement in their job-effectiveness but a decline in their well-being due to work intensification.

“It is a fact that with no other social outlets work can become the major social interaction and time filler.” (#19, 2020)
Closed activities, particularly the closure of gyms, meant people were not able to pursue things they enjoy, which contributed to a decline in their physical and mental health, consequently impacting their job-effectiveness.

“The most psychological effect, weirdly enough, had been due to the fact that I couldn’t go to the gym because that was my escape.” (#50, 2020)

“I’m a person that does quite a lot of exercise. All of a sudden for two, three months I did virtually nothing and it impacted both my mental health as well as physical health.” (#57, 2020)

Some employees experienced the impact of the travel restrictions more than others, depending on their job function. For example, the lack of travel for the Partner Relations team impacted their ability to build relationships with the partner countries and increased their overhead tasks. For the Network Implementation team, it meant completely changing the way they operate and moving to outsourcing. Such factors resulted in reduced job-effectiveness as well as reduced job satisfaction of the employees.

“We just haven’t got as much done as we were capable of doing. It is not because we underperformed, it is because we weren’t allowed to perform and that was really annoying.” (#50, 2020)

The ex-pat employees reported feeling the lack of family support during the lockdown, and the inability to see their parents in their home country added to their stress levels.

“I can no longer see my elderly parents in my home country. There is also a restriction on my kids being able to travel. This is very hard. One suddenly realizes that the ease of living abroad has gone.” (#24, 2020)

“I remember going through all the issues at work and feeling like I could really use a maternal hug, I could really use my family, but couldn’t get the much-needed support due to the circumstances.” (#58, 2020)
On the other side, some employees reported the absence of business travel as a welcome break. It contributed positively to their well-being and job-effectiveness due to the absence of negative aspects associated with traveling frequently, such as catching early-morning taxis/flights, preparing for travel (packing/unpacking clothes, finding hotels), filing travel claims, etc.

“The time that you spend traveling is very unproductive; waiting at airports, finding the hotel and not sleeping very well also reduces your productivity and well-being. I think I’m more productive and less stressed now.” (#49, 2020)

Some employees also highlighted that they plan to travel less after normal times resume, as they found some meetings much more focused and effective if done virtually.

Individual factors. The individual factors include all those elements that are specific to and can be influenced by the individual in the context of working remotely. Those that emerged from the data analyses as having the most significant impact are: personality traits, lack of commute, healthy habits, career stage / skill level, home-working environment, time-planning flexibility and control.

Of these, the data analyses showed the most consistent correlation between personality traits and whether one flourishes in remote working or not. All the employees who reported increased well-being and job-effectiveness (n=6) also reported common personality traits such as being an introvert, needing a quiet environment to focus, being self-motivated, self-organized, and able to deal with ambiguity and change. In particular, the ability to accept the situation and get on with it helped many to preserve, if not improve, their well-being during the pandemic.

“I have a very self-sufficient and introvert personality. For me, motivation comes from within, I do not need others to ‘stimulate’ me.” (#24, 2020)

Some work a lot better in a monitored environment, and for others working alone does not match their learning styles and can impact their job satisfaction and effectiveness.
“I work a lot better if I am in a controlled space. At home, if no one’s breathing down my neck, I’m like, okay, this can wait.” (#58, 2020)

“I’m the kind of person who likes to have a sounding board. I like to have somebody to bounce questions or ideas off. So, I think that not being in the same room as people has had an impact on how quickly I’ve kind of come to know my job.” (#45, 2020)

The ability to ask questions casually in the office environment helps some be more effective at their jobs and thus reduces stress and increases job satisfaction.

“I do suffer from a great lack of confidence and being on your own, not asking people questions, doesn’t help that. Whereas in the office, you could jokingly ask somebody a question and not make yourself look a fool.” (#48, 2020)

Some employees highlighted that having a clear routine and rituals at the start and end of the working day helped them define clear boundaries between work and home; for example, packing away the laptop and monitor to get the living-room feel in the evening, going for a walk before and after working time, shutting the door of the study, etc. However, others reported feeling compelled to be available all the time because they are working from home now. Both traits seem to have an impact on the well-being and job-effectiveness, positively in the former case and negatively in the latter.

“I feel that I must be available at all hours. Making a clear delineation between work and home stresses me now. I feel that my colleagues who work weekends and evenings are judging me negatively for not doing so.” (#7, 2020)

“A lot of this is just to do with personality. If there is a job that needs to be done, I would like to get it done, even though the working day may have finished. Before there was the physical traveling to work and I had a beginning and an ending.” (#55, 2020)

Most employees quoted lack of commute as a positive factor, as it not only added extra available hours in their daily routine but also resulted in higher energy levels. Spending the spare time on personal hobbies, health or with family improved their work-life balance immensely. However, it
meant a lack of physical movement for a few employees as they commuted to work either by walking or cycling, which resulted in degraded mental and physical health.

“For me, the work-life balance has been completely turned around. I was able to save 3 hours from not having to travel to the office. It also allowed me to maintain my energy levels after work. I was able to pick up art, photography as hobbies again and complete writing the book I was trying to finish for years.” (#56, 2020)

With regard to healthy habits, quite a few employees reported that their eating habits are much better after switching to remote working. They eat more home-cooked, fresh and healthy food, and find it easier to follow new practices and discipline oneself without any distractions at home. Some employees also reported that they can now sleep more and find it easier to include exercise in their daily routine.

“I learnt to jog. I do not have biscuits at home like we have in the office. I have cooked more proper meals instead of buying sandwiches and prepared salads.” (#27, 2020)

“Overall, the pandemic caused me to consider my health, fitness, and potential susceptibility to COVID-19 more, which has given me a better perspective – for life.” (#38, 2020)

All these elements contributed toward better health for them and resulted in an increased ability to concentrate on the work.

One of the factors that emerged from the data analyses is how employees’ career stage / skill level impacted their well-being and job-effectiveness while working remotely, especially for new joiners. The employees who were experienced and able to work independently at home were more effective at their job due to the lack of distractions. In contrast, the employees who needed support struggled to meet their objectives, which added to their stress levels and job satisfaction. The observation is further strengthened by the fact that all employees within the age group 20–29 reported a decline in their job-effectiveness (Appendix C).
“I graduated [X] years ago and stepped into this role kind of expecting a lot of guidance, which I didn’t really receive.” (58, 2020)

“I was very surprised to see how easy it was to be part of the organization. I was very happy to jump into conversations on Slack. I am at a career stage where I can be myself. I didn’t need hand-holding, I understood what I am expected to do and deliver.” (52, 2020)

Having a proper home-working environment (separate study, ergonomic desk and chair, monitors, external keyboard, and mouse) helped employees maintain better posture and focus, thus enabling them to perform their job effectively. The employees without a proper setup reported posture-related health issues, which impacted their job-effectiveness and general health.

Although the company’s policy allowed employees to buy proper home-working equipment, many could not take advantage of it due to the lack of space in their homes.

“I think it’s really great that GÉANT has a Home-Working Equipment Policy to give people equipment to set up home offices. But for me, it is completely useless because I live in a 55 square metre apartment. It feels like a really lovely benefit for people who live in big houses.” (45, 2020)

More time-planning flexibility and control has been cited by many employees as a positive factor contributing to their well-being and job-effectiveness. If the employees felt more creative and energetic at night, they could choose to work at that time; if the weather was nice in the daytime, they could go out for a walk at lunchtime and continue working late in the evening. Some employees also highlighted that it is much easier to combine private and work appointments while working from home; it allows them to manage both their personal and work life effectively.

“Overall, I would say that remote working gave me more control over my own life.” (21, 2020)

“It feels like my life is more organized in many ways when I’m not working from the office.” (42, 2020)
Figure 9 summarizes the above findings in a conceptual model covering the various factors impacting employees’ well-being and job-effectiveness while working remotely full-time during the pandemic. The factors described were found to impact both well-being and job-effectiveness together, instead of one or the other, which further highlights the interdependency of these two variables.

DISCUSSION

The study sought to investigate the impact of full-time remote working on the relationship between employee well-being and job-effectiveness during the COVID-19 pandemic. The research was carried out at a medium-sized firm that had remote-work readiness at a moderate level and was accustomed to flexible working prior to the COVID-19 pandemic.

The study analysed the employees’ responses to well-being and job-effectiveness before and after the COVID-19-induced shift to remote working. The findings revealed a positive correlation between well-being and job-effectiveness more reliably before the pandemic, which is consistent with the existing studies in the area (Krekel et al., 2019; Bryson et al., 2014). There is still some evidence of a positive correlation between employee well-being and job-effectiveness after switching to full-time remote working. However, the results indicate a stronger correlation for decline in well-being and job-effectiveness (Table 3).

Furthermore, the research identified various factors (organizational, external, and individual) that impacted the remote workers’ well-being and job-effectiveness during the pandemic (Figure 9). Many of the factors identified in this research (e.g., technology readiness, communication, job type, lack of commute, skill level, personality traits, and more time-planning flexibility and control) overlap with the existing literature to some extent (Kelliher & Anderson, 2009; Bosua et
Nevertheless, the study brings out some original findings for practitioners as well as researchers, as discussed below.

**Organizational Factors**

In contrast to previous studies where the emphasis has been on the relationship between remote workers and their managers to achieve job-effectiveness (Bosua et al., 2012; Grant et al., 2013), the current research identifies organizational support as one of the critical elements that can impact employees’ well-being and job-effectiveness. The extent to which employees believe their organization cares about their well-being has a strong influence on their engagement levels and consequently their job-effectiveness. The unusual nature of the current circumstances might not persist in the long term. However, that does not diminish the importance of organizational support to making employees feel valued and, consequently, its impact on their well-being and job-effectiveness.

The study indicated that an organization’s readiness for remote working directly influences employees’ well-being and job-effectiveness. Furthermore, the study discovered that some of the negative communication aspects of remote working could be mitigated by using appropriate technology. By ensuring company-wide adoption of the right technology, organizations can promote watercooler moments and collaboration among employees in a virtual environment.

**External Factors**

Given the contextual variations, the present study highlights the impact of external factors (caring responsibilities, lack of social interaction, closed activities, and travel restrictions) on employees’ well-being and job-effectiveness. The presence of such factors makes the current form of remote working very different from typical remote working, and explains the difference noticed in the relationship between employee well-being and job-effectiveness during the pandemic.
Many of the early studies (post-COVID-19) have established that remote working can succeed and does not impact employees’ job-effectiveness (BCG Global, 2020; Maurer, 2020). In contrast, the current study found that the number of employees who experienced a decline in their well-being and job-effectiveness is significantly higher than those who reported improvement while working remotely during the pandemic (Table 3). The difference in the findings might be explained by the length of time that has elapsed between the early studies and this research.

While some employees could not perform their job functions due to global travel restrictions, others welcomed the break in travel. It also made them realize how some of their meetings could be more effective and focused if done virtually. Practitioners need to re-evaluate the business travel needs carefully as it has implications in terms of time lost in traveling as well as work-life balance and stress levels of employees.

**Individual Factors**

The previous research has highlighted that employees with personality traits such as being self-driven, self-disciplined, and self-managing are more likely to succeed in the remote-working environment (Bosua et al., 2012; Grant et al., 2013). In addition to these traits, the present research also found a strong correlation between personality traits such as being an introvert and preferring to work in a quiet environment, which were common among all the respondents who reported improved well-being and job-effectiveness. Perhaps the difference can be associated with the contextual difference, as an individual’s preference to work remotely might have been guided by their favourable personality traits before COVID-19-induced remote working. Thus, the relationship might not have emerged distinctly.

In addition to the above personality traits, the analyses showed that the employees’ resiliency, adaptability, and ability to deal with ambiguity were essential contributing factors to preserve, if not improve, their well-being and job-effectiveness during the COVID-19 crisis. Even though
organizations cannot influence external factors, they can prepare employees to overcome such challenges by nurturing new skills and behaviours through appropriate training. The existing research in the area (Grant et al., 2013) has highlighted the need for remote workers’ training; however, the focus has been on developing technical competency.

Groarke, Berry, Graham-Wisener, McKenna-Plumley, McGlinchey and Armour (2020) reported a correlation between an individual’s living situation and their well-being during the COVID-19 pandemic. People who are living alone have been found to be more susceptible to a negative state of well-being. However, the present study found that it is not a single, standalone factor that impacts employee well-being and job-effectiveness. Instead, it is a combination of factors, such as living situation, personality type, skill level, and job type. A few respondents living on their own reported improved well-being and job-effectiveness after switching to full-time remote working during the pandemic.

The study revealed the importance of customized virtual onboarding processes for new joiners based on their experience level. While experienced employees seamlessly became part of the organization, fresh graduates found it very challenging to adjust. The existing literature did not capture this aspect, possibly because many organizations required new joiners to come to the office for a minimum amount of time before they could work remotely.

To the best of the author’s knowledge, none of the existing research has talked about the home-working environment’s impact on employees’ well-being and job-effectiveness. Nevertheless, the current study found that a suitable home-working environment is essential, and the lack thereof can negatively impact employees’ well-being and job-effectiveness.

**Additional Insights**

Kelliher and Anderson (2009) identified that while working remotely, work intensification was a symptom of employees’ sense of obligation toward their employer for being allowed flexibility,
where they reciprocated with additional effort. The current research also identified the presence of work intensification; however, the *underlying causes* are different due to the contextual differences:

- Work has become a primary time-filler source due to a lack of available social activities during the national lockdown.
- In the absence of ad-hoc conversation, employees need to perform more actions (email/plan a meeting) to achieve the same job-effectiveness level.

The work-family conflict is a well-known theme in the remote-working context (Noonan & Glass, 2012; Grant et al., 2013; Hoeven & Zoonen, 2015; Eddleston & Mulki, 2015; Hartig et al., 2007). However, its impact on remote workers’ well-being and job-effectiveness has *significantly intensified* during the pandemic. Employees are now balancing work with childcare, home-schooling, and supporting vulnerable relatives while working from their kitchens and living rooms.

The present study concludes that remote working is not for everyone. Individuals are different, and so are their preferences, circumstances, learning and working styles. Thus, not everyone has an optimum remote-working environment that supports their well-being and job-effectiveness in the best possible way. The result is that while some employees thrived, others struggled with the current form of remote working. Also, employees have reported different experiences at different times. While some enjoyed the experience during the summer, with relaxed government restrictions, they struggled to cope during the winter months, with tighter lockdown restrictions. Nearly all the research participants supported a hybrid approach that gives them the flexibility to choose different work locations (home/office). Therefore, in line with the McKinsey study (2020), the author proposes that organizations will have to shift their focus from a fixed approach to a more flexible approach that recognizes differences amongst their employees.
RECOMMENDATIONS

Based on the discussion above, the author would make the following recommendations (Table 5) for practitioners to influence employees’ well-being and job-effectiveness positively in a remote working-environment:

See Table 5

LIMITATIONS

The research was carried out at a medium-sized, not-for-profit organization that had remote-work readiness at a moderate level and allowed employees to work from home for up to two days a week prior to the COVID-19 pandemic. As the representative sample for the research does not come from organizations of different types, sizes or industries, it can have implications for generalizability.

The findings presented here need to be viewed in the study’s context and may not apply to other circumstances. For example, the employees were already benefitting from flexible working; therefore, the switch to full-time remote working might not have been viewed as much of an improvement. Second, since the organization’s culture allows its employees to have job autonomy, the research participants may have been able to organize their work more effectively after moving to full-time remote working.

As a qualitative method was used to measure the employees’ well-being and job-effectiveness, the findings might be subject to participant’s and researcher’s bias. The participants might have been inclined to give socially acceptable answers because the researcher worked for the same organization at the time of the study.
POSSIBLE AREAS FOR FUTURE RESEARCH

A peripheral observation came from the communication factor. The employees’ visibility of other parts of the organization and casual knowledge transfer have suffered due to the difference in the combination of fellow colleagues with whom they interact on a day-to-day basis. In the short term, it might not impact an individual’s job-effectiveness; however, it could potentially have serious implications for collaboration and innovation in the long term. Future research is required to confirm the suggested finding as more data becomes available over a more extended period.

It was observed that rather than flexibility to work remotely per se, it is perception of flexibility which is correlated with employee well-being and job-effectiveness. Due to the enforced nature of remote working during the pandemic, it was no longer a discretionary option chosen by employees. Furthermore, not having the option to work from the office almost created an opposite effect for some.

Nearly all the existing literature has talked about the impact of remote/flexible working rather than the psychological state of flexibility, except Kossek et al. (2006) (Table 2). They associated employee well-being with the psychological constructions of flexibility regarding job control and home/work boundary management. The current study found peripheral evidence which suggested that, compared with respondents who perceived a lack of flexibility in their work role, those who perceived more flexibility reported higher job-effectiveness through improved engagement levels and likewise a positive state of well-being through enhanced job satisfaction. This raises a question for future research: the relationship between an employee’s perception of flexibility and their well-being and job-effectiveness.
In general, there is insufficient research on understanding the relationship between well-being and job-effectiveness in a remote-working context, and future research is required to understand the relationship in a much wider context.

**CONCLUSION**

The current research was novel in that it explored the relationship between employees’ well-being and job-effectiveness while working remotely during the pandemic. The research found the two variables to be positively correlated; however, the evidence indicates a stronger correlation for decline in well-being and job-effectiveness. The study also identified three types of factors (organizational, external, and individual) (Figure 9) that can influence employees’ well-being and job-effectiveness in a pandemic-induced remote-working context, followed by recommendations for practitioners (Table 5) in relation to long-term remote working.

In addition to confirming the presence of some of the factors highlighted by existing literature in the current context, the study also identified some original findings, as presented in the Discussion section. The study also implied that organizations should shift their focus from a fixed to a more flexible approach to remote working that takes into account the differences amongst its employees.

Furthermore, the study highlighted the limitations (with regard to generalizability, specificity of the study setting, participant’s and researcher’s bias) and possible areas for future related research (remote working’s implications for collaboration and innovation in the long term, exploring the relationship between well-being and job-effectiveness in a much wider context and, finally, the relationship between employees’ perception of flexibility and their well-being and job-effectiveness) to consider.
ACKNOWLEDGEMENTS

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Tables

**TABLE 1**

Conceptualization of Work-Related Well-Being (adapted from Taris and Schaufeli, 2015)

<table>
<thead>
<tr>
<th></th>
<th>Affective well-being</th>
<th>Professional well-being</th>
<th>Social well-being</th>
<th>Cognitive well-being</th>
<th>Psychosomatic well-being</th>
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<tbody>
<tr>
<td>(1)</td>
<td>– e.g., job satisfaction, work-life balance, emotional exhaustion/fatigue</td>
<td>– e.g., job competency and autonomy</td>
<td>– e.g., quality of social functioning at work</td>
<td>– e.g., ability to take up new information and concentrate at work</td>
<td>– e.g., physical and mental health</td>
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<tr>
<td>(2)</td>
<td><strong>Professional well-being</strong></td>
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<td>(3)</td>
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<td>(4)</td>
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<td>(5)</td>
<td><strong>Psychosomatic well-being</strong></td>
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**TABLE 2**

Literature Review Summary — Employee Well-Being and Job-Effectiveness in the Remote-Working Context

<table>
<thead>
<tr>
<th>Research</th>
<th>Well-Being</th>
<th>Job-Effectiveness – Findings</th>
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<tbody>
<tr>
<td>Bosua et al., 2012</td>
<td>Work-life balance Reduced stress Flexible work schedules</td>
<td>With well-being, productivity improves Productivity enablers: technology, trust, self-driven, self-managing and management approach</td>
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<tr>
<td>Author(s)</td>
<td>Source of the stress</td>
<td>Effective communications</td>
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<tr>
<td>Bloom et al., 2013</td>
<td>Job satisfaction</td>
<td>Psychological attitude</td>
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<td></td>
<td>Psychological attitude</td>
<td>Job attrition</td>
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<tr>
<td>Noonan &amp; Glass, 2012</td>
<td>Work-family conflicts</td>
<td>Increased working hours</td>
</tr>
<tr>
<td>Grant et al., 2013</td>
<td>Overwork</td>
<td>Managing work and home boundaries</td>
</tr>
<tr>
<td></td>
<td>Increased stress levels</td>
<td>Increased working hours</td>
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<tr>
<td>Hoeven &amp; Zoonen, 2015</td>
<td>Work-life balance</td>
<td>Job autonomy</td>
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<td></td>
<td>Effective communication</td>
<td>Effective communication</td>
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<td>Kelliher &amp; Anderson, 2009</td>
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<tr>
<td>Eddleston &amp; Mulki, 2015</td>
<td>Overwork</td>
<td>Work-family conflicts</td>
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<td>Wheatley, 2017</td>
<td>Work location and timing elasticity</td>
<td>Increased leisure time</td>
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<td>Menezes &amp; Kelliher, 2011</td>
<td>Reduced stress</td>
<td>Source of the stress</td>
</tr>
<tr>
<td>Hartig et al., 2007</td>
<td>Reduced stress</td>
<td>Blurred boundaries between work and home</td>
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<tr>
<td>Kossek et al., 2006</td>
<td>Well-being associated with the perception of control over job and work-family boundaries</td>
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</table>
Table 3

Change in Employees’ Well-Being and Job-Effectiveness After Switching to Full-Time Remote Working

<table>
<thead>
<tr>
<th>Well-Being</th>
<th>Improved</th>
<th>No Change</th>
<th>Declined</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Improved</strong></td>
<td>6 (+2)</td>
<td>8 (-2)</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td><strong>No Change</strong></td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td><strong>Declined</strong></td>
<td>2</td>
<td>9</td>
<td>19</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10</td>
<td>22</td>
<td>25</td>
<td>57*</td>
</tr>
</tbody>
</table>

* For 3 new joiners, before ratings were not available.

Table 4

Organizational Support Initiatives

- In case employees were not able to fulfill their contracted hours due to childcare or other caring responsibilities, they could book the lost hours against the specifically defined time code for the COVID-19 contractual time shortage.

“Several of you are coping with trying to work from home while home-schooling and/or nursing. If this is the case, I urge you to take care of yourself. We fully understand that in such a situation you may not be able to fulfill your contracted hours. Please do not worry about that. Talk to your manager and set priorities and see what tasks can be delayed or transferred. Book the lost hours against the time code we provided for this. Do not stretch yourself too thin between work and private obligations. We understand the situation, and this will not impact your track record. Your well-being and health are more important to us.” Excerpt from CEO email
• Established a COVID-19 Slack channel for serious and less serious exchanges of messages among the staff members.

• The organization has been paying an allowance for Internet connectivity to its staff members.

• Implemented a Home-Working Equipment Policy, which allowed employees to buy a desk, chair, IT equipment and peripherals as required to be able to perform their duties.

• Gifts were posted to all employees on special occasions (e.g., Easter, Christmas), as well as in between, as a token of appreciation for their continued support during the difficult times.

• Planned remote social catch-ups, e.g., regular Friday remote drinks, Christmas dinner.

• The CEO undertook one-to-one “Walk and Talk” sessions with staff members.

• Regular transparent, honest, and empathetic emails from the CEO to all employees.

• Various line managers also organized regular social catch-ups at the team level.

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**TABLE 5**

**Remote-Working Recommendations – Practitioners**

<table>
<thead>
<tr>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adopt a flexible approach to remote working that recognizes and caters for individual differences. Such an approach would be likely to result in a mutually beneficial arrangement for both organizations and their employees.</td>
</tr>
</tbody>
</table>

| Ensure adequate digital infrastructure is in place to support various business functions. A structured approach to digital transformation should be adopted by reviewing current processes and business models to find gaps, followed by prioritizing identified actions and accelerating digital investments. |

| Review existing communication tools/applications used by the organization to ensure their appropriateness for the remote-working environment. The focus should be on facilitating intra-team, inter-team as well as company-wide communication. Organizations should explore and invest in applications that enable greater collaboration among employees in a remote-working environment. |

| Ensure company-wide acceptance of technology through appropriate training and policies. Providing technology alone is not sufficient. |
Look for ways and optimize company policies to take individual differences into account, and to make employees feel well-supported irrespective of their work locations (see Table 4 for suggestions for a medium-size firm).

Re-evaluate and optimize business travel considering its impact on employees’ well-being and job-effectiveness as well as on the environment.

Prepare employees for a virtual-working model. Organizations need to adopt a thorough training plan, covering topics such as:

- Maintaining an effective work-life balance,
- Nurturing skills such as resiliency, adaptability, and ability to deal with ambiguity.
- Personalized coaching for employees who are struggling.
- Provide forum to learn from each other and share challenges.
- Guidance for managers on how to adjust their management style based on team members’ competencies/personality type and effectively lead in a virtual environment.
- Health and safety training in remote-working context.

Explore the use of technology such as artificial intelligence (AI) which can help understand individuals’ behaviors and how they change over time while reinforcing and optimizing healthy behaviors (Deloitte Insights, 2020).

Evaluate and optimize the new joiners’ onboarding process to ensure its appropriateness for the remote-working environment while taking the nuances of their experience/skill level into account.

Consider working from anywhere to retain and get access to a bigger talent pool.

**Figures**

**FIGURE 1**

**European Workforce “Sometimes” Working from Home as a % of the Total Employment (2008–2018) (Merchant Savvy, 2020)**
Note: The Netherlands does not have data from 2008 (it only started submitting home working figures in 2014).

FIGURE 2

Main Research Question

Context – Remote working during the pandemic
### FIGURE 3

**Research Gap**

<table>
<thead>
<tr>
<th>Pre-COVID-19 Remote Working</th>
<th>COVID-19-Induced Remote Working</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job-Effectiveness and Well-Being</strong></td>
<td><strong>Job-Effectiveness</strong></td>
</tr>
<tr>
<td>Lewis and Cooper, 2005</td>
<td>Baker et al., 2007</td>
</tr>
<tr>
<td>Bosua et al., 2012</td>
<td>Menezes and Kelllher, 2011</td>
</tr>
<tr>
<td>Bloom et al., 2013</td>
<td>Hickman, 2019</td>
</tr>
<tr>
<td></td>
<td>Gallup, 2020</td>
</tr>
<tr>
<td></td>
<td>Grant et al., 2013</td>
</tr>
<tr>
<td></td>
<td>Noonan and Glass, 2012</td>
</tr>
<tr>
<td></td>
<td>Vaidya et al., 2020</td>
</tr>
<tr>
<td></td>
<td>Carnevale &amp; Hata, 2020</td>
</tr>
<tr>
<td></td>
<td>University of Exeter, 2021</td>
</tr>
<tr>
<td></td>
<td>McKinsey, 2020*</td>
</tr>
<tr>
<td><strong>Well-Being</strong></td>
<td><strong>Well-Being</strong></td>
</tr>
<tr>
<td>Casey &amp; Grzywacz, 2008</td>
<td>Wang et al., 2020</td>
</tr>
<tr>
<td>Kelliher &amp; Anderson, 2010</td>
<td>McKinsey, 2020*</td>
</tr>
<tr>
<td>Menezes and Kelllher, 2011</td>
<td></td>
</tr>
<tr>
<td>Eddeleston &amp; Mulki, 2017</td>
<td></td>
</tr>
<tr>
<td>Wheatley, 2017</td>
<td></td>
</tr>
<tr>
<td>Hoeven and Zoonen, 2015</td>
<td></td>
</tr>
<tr>
<td>Charalampous et al., 2019</td>
<td></td>
</tr>
<tr>
<td>Grant et al., 2013</td>
<td></td>
</tr>
<tr>
<td>Noonan and Glass, 2012</td>
<td></td>
</tr>
</tbody>
</table>

*Compares results for remote and non-remote workers*

Note: The literature mentioned is not a complete list, only the research studies used for this review have been shown.
FIGURE 4
Representative Sample – Demographics & Related Aspects

- Gender
  - Female: 26
  - Male: 33
  - Prefer not to disclose: 1

- Age Group
  - 20-29: 6
  - 30-39: 12
  - 40-49: 17
  - 50-59: 15
  - 60 or above: 9
  - Prefer not to disclose: 1

- Job Tenure
  - 1 year or less: 11
  - 1-2 years: 9
  - 3-6 years: 14
  - 7-10 years: 13
  - 10 years or above: 12
  - Did not answer: 1

- Living Situation
  - On your own: 13
  - With Partner: 14
  - With Friends/Flat-mates: 5
  - With Family: 28

- Caring Responsibilities
  - Yes: 28
  - No: 31
  - Did not answer: 1

- Ex-pat
  - Yes: 20
  - No: 39
  - Did not answer: 1

FIGURE 5
Employees’ Well-Being and Job-Effectiveness – Before

FIGURE 6
Employees’ Well-Being and Job-Effectiveness – After
FIGURE 7

Number of Participants Who Rated Well-Being and Job-Effectiveness “High”/ “Extremely High”
FIGURE 8

Number of Participants Who Rated Well-Being and Job-Effectiveness “Low”/ “Extremely Low”
FIGURE 9
A Conceptual Model – Factors Impacting Remote Workers’ Well-Being and Job-Effectiveness

APPENDIX A: QUESTIONNAIRE & IN-DEPTH INTERVIEWS – STRUCTURE

<table>
<thead>
<tr>
<th>Section</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information</td>
<td>Gender</td>
</tr>
<tr>
<td></td>
<td>Options: Male, Female, prefer not to disclose</td>
</tr>
<tr>
<td></td>
<td>Age Group</td>
</tr>
<tr>
<td></td>
<td>Options: 20–29, 30–39, 40–49, 50–59, 60 or above, prefer not to disclose</td>
</tr>
<tr>
<td></td>
<td>Job Role</td>
</tr>
</tbody>
</table>
Features of Remote Working Experience

<table>
<thead>
<tr>
<th>Options: Execs, Line Manager, or Individual Contributor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you live …</td>
</tr>
<tr>
<td>Options: On your own, With Partner, With Family, With Friends/Flatmates</td>
</tr>
<tr>
<td>Were you responsible for the care of others (children, elderly, other) while working remotely?</td>
</tr>
<tr>
<td>(Yes/No)</td>
</tr>
<tr>
<td>Were you working from the UK or Netherlands while it is not your home country?</td>
</tr>
<tr>
<td>(Yes/No)</td>
</tr>
<tr>
<td>If yes, how has it impacted your job-effectiveness and well-being?</td>
</tr>
<tr>
<td>How long have you been working with the organization?</td>
</tr>
<tr>
<td>Are you or any members of your household considered vulnerable / in a higher risk category from coronavirus?</td>
</tr>
<tr>
<td>(Yes/No)</td>
</tr>
</tbody>
</table>

**Job-Effectiveness**

| Rate* your job-effectiveness before switching to full-time remote working during the COVID-19 pandemic. |
| Rate* your job-effectiveness after switching to full-time remote working during the COVID-19 pandemic. |
| What factors had a positive impact on your job-effectiveness while working remotely full-time during the pandemic? |
| What factors had a negative impact on your job-effectiveness while working remotely full-time during the pandemic? |

**Well-Being**

<p>| Job Satisfaction |
| Rate* your job satisfaction before switching to full-time remote working. |
| Rate* your job satisfaction after switching to full-time remote working. |
| What factors had a positive impact on your job satisfaction? |
| What factors had a negative impact on your job satisfaction? |
| Stress Level |
| Rate* your stress level before switching to full-time remote working. |</p>
<table>
<thead>
<tr>
<th><strong>Work-Life Balance</strong></th>
<th>Rate* your work-life balance before switching to full-time remote working.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rate* your work-life balance after switching to full-time remote working.</td>
</tr>
<tr>
<td></td>
<td>What factors had a positive impact on your work-life balance?</td>
</tr>
<tr>
<td></td>
<td>What factors had a negative impact on your work-life balance?</td>
</tr>
<tr>
<td><strong>General Health</strong></td>
<td>Rate* your general health before switching to full-time remote working.</td>
</tr>
<tr>
<td></td>
<td>Rate* your general health after switching to full-time remote working.</td>
</tr>
<tr>
<td></td>
<td>What factors had a positive impact on your general health?</td>
</tr>
<tr>
<td></td>
<td>What factors had a negative impact on your general health?</td>
</tr>
</tbody>
</table>

Are there any other comments/insights relevant to the research topic that you would like to add?

* A Likert scale ranging from 1 (Extremely Low) to 5 (Extremely High) was used to obtain all the ratings.
APPENDIX F: RESULTS – CARING RESPONSIBILITIES

Well-Being

- Yes: 58% Improved, 15% No Change, 27% Declined
- No: 46% Improved, 18% No Change, 36% Declined

Job-Effectiveness

- Yes: 35% Improved, 50% No Change, 15% Declined
- No: 50% Improved, 29% No Change, 21% Declined