"Covid-working": what to keep and what to leave? Evidence from an Italian company

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Abstract

Purpose – This paper aims to explore the extent to which Covid-19 has challenged work habits and outcomes. The authors argue that after the lockdown period workers have been experiencing a new work mode called "Covid-working". The aim is to provide a first interpretation of this phaenomenon and elaborate on future real estate strategies and workplace policies based on this experience.

Design/methodology/approach – Using survey data, this research analyses Covid-working in a large-sized company in Italy. The survey was answered by 90 employees and addresses three domains: locations of work; a comparison between work-from-home (WFH) and work from the office; and outcomes of Covid-working vs office-working.

Findings – With Covid-working, the workers of the case company drastically changed their traditional work from the office approach to pure WFH. While this abrupt switch might generate difficulties in adaptation, this working practice was generally appreciated by this company's workers. Positive and negative outcomes of Covid-working confirm previous studies on remote working. Recommendations on multi-location of work, new value for the headquarters and diversity empowerment open up avenues for future real estate strategies.

Originality/value – Observations on Covid-working are still limited and mainly appear on grey literature, due to the newness of this phaenomenon. Empirical studies such as the proposed one can increase companies' awareness of the positive and negative outcomes of this experience and support their future workplace strategies.

Keywords Workplace, Work outcomes, COVID-19, Work from home, Corporate Real Estate strategy, Multi-location

Paper type Research paper

New decisions on old assets

After the spread of the Covid-19 pandemic, companies have started to question their way of working and of using the office. Employees' habit to get together every day in the same space

has been challenged by a forced remote working regime that is predicted to be long lasting. But how are different companies embracing new work habits? Should workplace policies be subjected to change after this experience? This paper starts with defining a few pandemic-related workplace issues and reporting some first empirical findings about work in Coronavirus times. Afterwards, the preliminary results are described from a survey distributed in an Italian publishing company. They show how the employees of this organization have experienced work since the pandemic's outbreak. The paper concludes with some reflections on the possible evolution of work practices and related real estate strategies in the case company.

Nowadays, most work types are compatible at least partially with remote working (e.g. 56% of the US workforce according to Global Workplace Analytics, 2020) and, according to the US Census Bureau, nearly one-third of the US workers and half of all "information workers" will gladly work remotely at least until the end of 2021 and beyond (World Economic Forum, 2020). Recent surveys (Beaudoin et al., 2020) report that, when free to decide, only a minority of office staff would return to the company office full time, while most of them are now willing to alternate office and home and other work locations. Leesman studies confirm that the experience of work from home is outstanding compared to the office experience (Leesman, 2020).

Altogether these results have pushed companies to make radical real estate decisions. The latest corporate real estate (CRE) strategies have been differentiating around three main work policies:

(1) work from the office all the time – traditional way of working;

(2) work-from-home (WFH) all the time – teleworking; and

(3) multi-location work – also called "smart working" (Gastaldi et al., 2014; Iannotta et al., 2020) or "'agile', 'flexible', 'new ways of working' (NWW), 'future ways of working', 'flexi-office', etc". (Engelen et al., 2018, p. 2).

Workplace strategies highly depend on local contexts. Before the Covid-19 pandemic, on average, about 35%–45% of workers in the USA and EU-28 have worked from home or a public space (e.g. libraries, cafés) at least occasionally, but the range of people adopting this working mode varies a lot by country. In Europe, Nordic Countries are all above 50%, but Italy and Portugal show a low adoption (25%) (OECD, 2020). According to Leesman (2017), only 30% of workers have a predominantly mobile, activity-based workstyle, whereas about 70% have a static, traditional workstyle.

With the pandemic a traditional way of working is embraced as a long-term strategy by companies like Netflix, Bloomberg, and Yahoo, that respectively consider home-working a "pure negative", offer a premium stipend to attract London workers back to the headquarters (HQ), and have tried remote working on a large-scale in the past but have definitely abandoned it (The Economist, 2020). In effect, the office remains the first location to support tacit collaboration, avoid social isolation, and offer a place where "meanings are constructed" (Courpasson et al., 2016) and where feelings of belonging, ownership, and control over the workspace support workers experience (Vischer, 2008; Brown, 2009). Despite virtual collaboration gaining popularity, face-to-face (F2F) interactions that require meeting in real space and time are still unique. Early studies such as Kraut et al. (2002) suggested that increased communication and interaction is potentially a key benefit of collocation of workers in a corporate campus. Spatial proximity between employees matters because it is essential for the social aspects of collaborative workplace behaviour (Kabo, 2017; Peponis et al., 2007) and tacit knowledge exchanges (Gerpott et al., 2017).

Conversely, teleworking will be the main work policy for Twitter, Facebook and Mastercard, with companies such as Google and Uber offering their employees an allowance to set up a

home office (*The Economist*, 2020). Houses indeed, after re-spatialisation of work, are becoming increasingly hybrid (Halford, 2005). An extensive body of literature analyses telework and its outcomes. Some recognize its advantages, including reducing costs (Gregg, 2011), enabling employees to self-determine where and when to work (Morgan, 2004; Gajendran and Harrison, 2007; Pyöriä, 2011), improving morale (Wheatley, 2012), enhancing productivity (Bloom *et al.*, 2015) and reducing commuting stress (Clark *et al.*, 2020) amongst others. Generally, organizations that have experienced teleworking even before the pandemic claim both positive and negative effects in the exploitation of physical and human resources (Tagliaro, 2020).

WFH, though, poses risks such as knowledge sharing hurdle (Sarker *et al.*, 2012), work intensification (Kelliher and Anderson, 2010), collaboration obstruction (Baruch, 2000; Pearlson and Saunders, 2001; Pyöriä, 2011), work–family conflict especially for women (Sullivan and Lewis, 2001), task-related stress, or lack of resources at home (Konradt *et al.*, 2003). To counterbalance these common disadvantages of WFH, already before the pandemic, more and more companies have been adopting multi-location work including organizational workplaces, third spaces and other spaces somewhere "in-between" (Liegl, 2014; Kojo and Nenonen, 2015; Di Marino and Lapintie, 2018) that provide a supportive ecosystem of services. Disruptive decisions to promote multi-location work have been taken by Pinterest that ended a lease obligation in San Francisco with the aim to boost NWW and a "more distributed workforce" (The Economist, 2020).

However, companies' declarations about their new real estate approaches often seem more based on top-down corporate policies than on accurate investigation on the ways of working of the employees and on a thorough analysis of the advantages and disadvantages of alternative modes (besides costs reduction). Also, they generally regard the whole company and do not show to acknowledge different groups in the organization that potentially might benefit from different workplace strategies. For instance, recent studies on Covid-19 effects on workers are showing harsher impacts on women and young workers (Kniffin *et al.*, 2021) and older studies highlight that house characteristics, size, support facilities and family composition are key to the success of WFH (Kojo and Nenonen, 2015).

Remote working and telework have been decisive to sustain production during the pandemic emergency, but the effects on productivity remain unclear (OECD, 2020). Overall, the extent to which prior studies on home working or flexible working (Palvalin *et al.*, 2017) are applicable to the current situation is still ambiguous, as it took place from an exceptional context. Besides empirical observations and comments that recently came up in the form of grey literature, key topics of attention are rising for companies and scientists that require in-depth research. It is interesting to investigate the effects of the pandemic on work modes and if alternative work arrangements that have been pushed by the pandemic will affect the attitude of more traditional companies toward new workplace strategies.

This paper explores the extent to which Covid-19 has challenged traditional ways of working by rooting new working arrangements. We argue that, after the lockdown, workers have been experiencing a totally new work mode, which cannot be defined neither as telework, nor as agile/smart work. We characterise this unprecedented workstyle based on evidence from the experience of an Italian company, and we outline a first interpretation of this phaenomenon on employee outcomes. Our research aims at exploring prospective trends by studying one company case. The questions this paper investigates are: how much has Covid-19 changed work habits and outcomes in the case company? How much of this change is there to stay?

Methodology
We submitted a 35-question survey to one company addressing a new work experience that characterizes the way of working after the stricter lockdown phase enforced in many countries. In Italy, prevention regulations locked people at home between March 9 and May 3, 2020.

Afterwards, the degree of individuals' freedom to move around cities increased to almost normal levels, while also non-essential work activities were re-opened. Thus, from the beginning of May, a new work practice has been in place. We call this new work experience "Covid-working". Covid-working configures as a working policy that allows workers to be somewhat free to move in workspace locations other than their homes but strongly discourages full presence of people in office buildings. Based on this policy, companies have developed various recommendations to manage their workforce mobility and balance out the time employees spend in the office and the time they spend working elsewhere.

The case company was sampled by convenience among a pool of corporations that the researchers have connection with. Motivations for the selection of this case lay on two aspects. On one hand, the company experienced demarcated changes in work arrangements after the Coronavirus outbreak from a full work-from-office practice to highly recommended WFH. On the other hand, the corporate HQ is highly attractive because of its architectural and historical value, therefore it is part of the company identity. Both these aspects are expected to have implications on the way to use the office for employees and on future real estate strategy.

The case company is *Arnoldo Mondadori Editore S.p.A.*, known as *Mondadori* [1], one of the most important European publishing groups (Table 1). The HQ of *Mondadori* is an iconic five-floor building designed by Oscar Niemeyer in the 1970s and locates in the outskirts of Milan (Italy). The internal layout is arranged from the idea to boost communication and collaboration among employees. It configures as a typical open plan interspersed only with service areas and small meeting rooms. A garden to host private and public events, a large auditorium, and an immense book warehouse complement the administrative function of the HQ.

Survey design and administration
The questionnaire investigated various macro domains, three of which fit the objectives of the present paper:

(1) locations of work before and after the lockdown;

(2) comparison between WFH and work-from-office arrangements; and

(3) outcomes – both positive and negative – of Covid-working compared to the previous office-based arrangement.

Additionally, the questionnaire profiled workers based on the amount of individual and collaborative activity in their daily work. The *work types* they perform was estimated through the time employees typically spend:

Company name	ARNOLDO MONDADORI EDITORE SPA
City	Segrate (Milano, Italy)
Date of establishment	1907
Total production value – thousands USD (2019)	999.933
N. employees (2019) in Milan Headquarter	2.018
Dimension	Very large company
N. of companies in the corporate group	46
Products and services	Publishing
Product classification - description	Periodicals: publishing or publishing and printing
NACE Rev. 2, core code	5814
NACE Rev. 2, core code	J – Services for information and communication

Table 1.
Mondadori company information (source: Bureau van dijk)

- alone to think and develop ideas; or
- interacting and conversing with colleagues (Heerwagen *et al.*, 2004).

Locations of work are assessed considering as multiple locations of work: "office", "third space", "home", "client's premises", "in transit", and "other" (items adapted from Kojo and Nenonen, 2015; Aroles *et al.*, 2019; Burchell *et al.*, 2020). The questionnaire asked to rate the frequency by which employees used those different locations for work in the past (i.e. before Covid-19 emergency), and use them now (i.e. during Covid-working). Lastly, virtual location of work is explored by asking the extent to which workers used and use virtual spaces (i.e. calls, Web meetings, platforms, etc.).

A *comparison between WFH and work from the office* was performed by assessing:

- types of workspaces workers were used to work from at the office (items adapted from Bodin Daniellsson, 2008 and from Hua *et al.*, 2010) and now at home; and
- preferences towards the two spaces according to specific physical environment variables (Appel-Meulenbroek *et al.*, 2018).

Outcomes of Covid-working vs office-working were investigated by considering self-perceived outcomes – including productivity, concentration, work–life balance and adequacy of working hours, and occasions to socialize (Appel-Meulenbroek *et al.*, 2018).

Finally, two open ended questions asked reflections and thoughts on effects of Covid-working on productivity and future changes in the home spaces.

The survey was finalized respecting the company's internal ethics and privacy policies, as requested by the head of the communication department, the Human Resources (HR) and the CRE managers. The managers distributed the questionnaire via their internal communication platform to the whole company's population who have access to it (1800 employees). The questionnaire was totally anonymous, and employees participated on a voluntary base. 116 answers were collected after 7 weeks, from July 24 to September 14, 2020. Of these, 90 questionnaires were totally completed. The response rate of 5.00% is considered satisfactory, giving both the high number of surveys that the employees had been asked to fill since the Covid-19 outbreak and the approaching summer vacation.

Respondents' profiles

The sample of respondents is composed of over two-thirds of female employees and the average age of the respondents is around 47 years old (spanning from 25 to 63). These first results resemble the general distribution of the whole Mondadori's population employed in Italy and the overall average of employees' age (Arnoldo Mondadori Editore, 2019).

Three types of workers are recognized. More than half of the respondents are engaged in an activity which, by nature, requires an equal distribution of time between individual work and interactions with colleagues or collaborators, while a smaller group interacts with colleagues for a predominant part of their time and only 15% of employees work mainly alone.

Furthermore, a complete job profile of the respondents emerges from their "role" within the organization and from the number of years they have been "linked" to the organization (Mitchell *et al.*, 2001).

First, concerning the role, 86% of respondents are employees dedicated to different tasks and belonging to different business units. Second, at the time of our survey, the respondents appear deeply linked to the organization, given the high number of years they were engaged within it (Table 2).

Female employees' sample	62 (67%)
Male employees' sample	27 (33%)
Overall Mondadori Gender Distribution	62% F; 38% M
Minimum age (sample)	25 y.o.
Maximum age (sample)	63 y.o.
Average age (population)	40 y.o.
Work types	
Balanced	55 (61% of the sample)
Collaborative	22 (24% of the sample)
Individual	13 (15% of the sample)
Role	
Employees	86% (77 people)
Executives	8.8% (8 people)
Managers	4.4% (4 people)
Journalist	1 person
Link to the organization	
Same job positions	Mean = 10.11 years (SD = 9.02)
Same organization	Mean = 16.82 years (SD = 10.05)
Same sector (publishing)	Mean = *15.70 years (SD = 14.46)*

Table 2.
Respondents' profiles

The typical worker at Mondadori is a middle-aged female employee, linked for a long time to the company and whose work time is equally spent on both individual and interactive activities.

Results

The following paragraphs show the descriptive statistics from the survey, highlighting differences – if any – based on employees' gender, age and work type and regarding:

- home as a new work location;
- the comparison of home and office space; and
- the outcomes reached by employees during Covid-working.

A new location of work: home

Before the pandemic's outbreak the company shows a very traditional approach to work, both for individual and collaborative activities, that implies full working from the office. Most of Mondadori's employees (about 80%) had never experienced work from home before the pandemic: 82 respondents out of 90 used to work always from the HQ. Some employees would only rarely or sometimes work from a client's office (19 respondents), from home (20 people), or in transit – e.g. train, airplane (21 people). The use of third spaces (e.g. coworking, bars, etc.) was barely considered: only two people rarely used this kind of spaces.

The opposite situation emerges when observing the trend after the lockdown (i.e. during Covid-working): respondents have rarely returned to the office (mean = 1.07; SD = 1.07, 0 = never and 4 = always) and working from home remains prevalent (mean = 3.55; SD = 0.60) to date.

The following table reports the mean frequency for each work location before and during Covid-working and the related *t*-test. As expected, there is not only a statistically significant increase in WFH and a general decrease in working from the office but also working from a client office significantly decreased (Table 3).

This switch goes in parallel with the use of virtual locations of work (e.g. conference calls, web meetings, digital platforms, etc.) to interact with colleagues. If before the pandemic only

9 respondents consistently used online locations (mean = 1.13, SD = 1.03, 0 = never and 4 = always), during Covid-working a substantial positive shift in the use of online locations (mean = 3.37; S.D. = 0.80) allowed collaborative work.

Breaking down these aggregated results by distinct respondents' groups, some key differences become evident. According to t-test more male than female employees use the workspaces at the company HQ (p value = 0.002) or workspaces at clients' premises (p value = 0.014) while more women than men stay home for working (p value = 0.001). These differences were not in place before the Covid-19 pandemic in this company. No differences in locations of work during Covid-working are found by age groups and work types.

Through a one-way analysis of variance (ANOVA) test, significant results emerge between groups in the use of virtual locations for work. If before Covid-working there was a different use of virtual locations between younger employees and older ones (p value = 0.180), with Covid-working this difference flattens out.

The questionnaire explored house typologies to understand the fit of current living conditions with WFH. Half of the respondents live in a three-room apartment (typically with two bedrooms and a kitchen/living area), 21% (19 respondents) in a four-room apartment, 15% (13 respondents) in a 2-room apartment and 15% (13 respondents) in +five-room apartment. Nobody lives in a studio. Even if the houses are generally medium-large, respondents do not frequently have – or use – a study room specifically dedicated to work (mean = 0.788; SD = 1.480, 0 = never and 4 = always). Indeed, 47.8% of the sample is often or always working in the living room (mean = 2.033; SD = 1.618), and 28.9% in the kitchen (mean = 1.30; S.D.=1.52). Almost nobody works from his/her bedroom (mean = 0.544; SD = 1.133) [2]. Working outdoor, for instance in private gardens, balconies or terraces is uncommon (mean 0.633; SD = 0.156), even though the survey was submitted over the summer. No respondents used shared/common terraces or gardens to work.

Again, house types and spaces used for WFH differ among groups. Based on results of the ANOVA test among the three age groups recognized, youngest employees have significantly smaller houses compared to their older colleagues (p value = 0.078). Independent sample T-test revealed that, when arranging workspaces at home, male employees work more in the kitchen (p value= 0.0671) or in their bedroom (p value = 0.0587) then their female colleagues. The use of the personal bedroom or a private workspace at home also differs across ages: younger employees use their bedroom for work more than their older colleagues according to ANOVA test (p value = 0.041 vs Group 2; p value = 0.031 vs Group 3).

Thus, when at home, workers perform their activities mostly in spaces that are devoted usually to other functions (i.e. living rooms and kitchen). Not only happens a functional overlap in WFH, when some spaces of the house become "hybrid" to accommodate temporarily different activities (Halford, 2005), but also a mix of users occurs.

Locations	Obs	Before Covid-19		During Covid-working		t-test [p value]
		Mean	SD	Mean	SD	
Office	90	3.889	0.409	1.067	1.068	0.0000
Client's office	90	0.378	0.787	0.122	0.537	0.0118
Third space	90	0.167	0.691	0.189	0.685	0.8287
Home	90	0.389	0.789	3.533	0.603	0.0000
In transit	90	0.411	0.806	0.356	0.812	0.6455
Virtual space	90	1.133	1.030	3.367	0.7996	0.0000

Table 3.
Work locations before Covid-19 and during "covid-working" and tests

Home spaces are frequently shared with cohabitants (77 respondents share their house with other people while only 13 respondents live alone). Specifically, among housemates the survey finds partners (for 60 people), pre-schoolers (for 14 people), school children (for 12 people), teenagers (for 11 people), and parents (for 7 people) or other relatives (e.g. grandparents; siblings) (for 24 people). Only 3 persons share the house with friends/housemates.

The surveyed sample was also asked if cohabitants share the specific spaces dedicated to work during working hours at home [3], finding that respondents are most of the time alone in the room where they work (mean = 2.01; SD = 1.71, 0 = never and 5 = always), while only rarely the sample shares the workroom with one or more pre-school children – aged between 0 and 5 years old (mean = 0.477; SD = 1.191) or with a schooler (mean = 0.767; SD = 1.281). In effect, during the Covid-working times schools did not operate regularly but most people can rely on other childcare solutions (summer camps, grandparent, baby-sitters, etc.) given the fact that in this period also non-essential activities re-opened. Most of the sample (63 people), instead, shares the workspace at home with other adults, for example their partner or spouse or other housemates (mean = 1.567; SD = 1.341) that are generally workers too.

On one hand, these data are coherent with houses' size: most of the people living in a two-room apartment are alone or share it with only one person, whereas large-sized apartments are shared with at least two other people to a maximum of five other people. On the other hand, these data show that workers under the same shelter alternatively prefer – or are forced – to work in the same room.

Among age groups, the ANOVA test confirms that older employees share the house with other workers more than younger or middle-aged employees (p value = 0.019). Younger employees live alone more frequently (p value = 0.052). Women, according to t-test, are more likely than men (p value = 0.062) to share their house with people that do not work (i.e. students or children).

Home vs office spaces
During Covid-working, respondents continued to extensively work from home even if they were somewhat free to return to the office. The reasons for this choice were investigated through a comparison of the home and the office settings.

Generally, respondents felt partially satisfied with their houses as workspaces (mean = 5.63; SD = 1.45, from 1 = totally unsatisfied to 7 = totally satisfied) [4]; 11 respondents are neither satisfied nor dissatisfied while only 6 people do not feel satisfied with their home as a workspace (Figure 1).

If compared to the workspace at the HQ, most of the respondents specified that they prefer the home workspace because of:

- aesthetics of the space (mean = 4.02; SD = 0.96; 1 = "much better at the office"; 5 = "much better at home");
- privacy (mean = 4.01; SD = 0.95);
- more comfortable indoor environmental quality (mean = 3.80; SD = 1.25);
- external view (mean = 3.83; SD = 1.19); and
- the availability of individual space thus the absence of distractions (mean = 3.80; SD = 1.25).

Conversely, some employees appreciate more the office spaces due to:

- the greater physical comfort, especially in terms of ergonomics (mean = 2.18; SD = 1.04);
- the opportunity to interact with colleagues thanks to the presence of spaces for interactions (mean = 2.66; SD = 1.11);

Preference towards work-from-home with respect to work from the office
(1=much better at the office; 5=much better at home; n=90)

Figure 1.
Comparison between
the home spaces and
the corporate spaces
(*n* = 90)
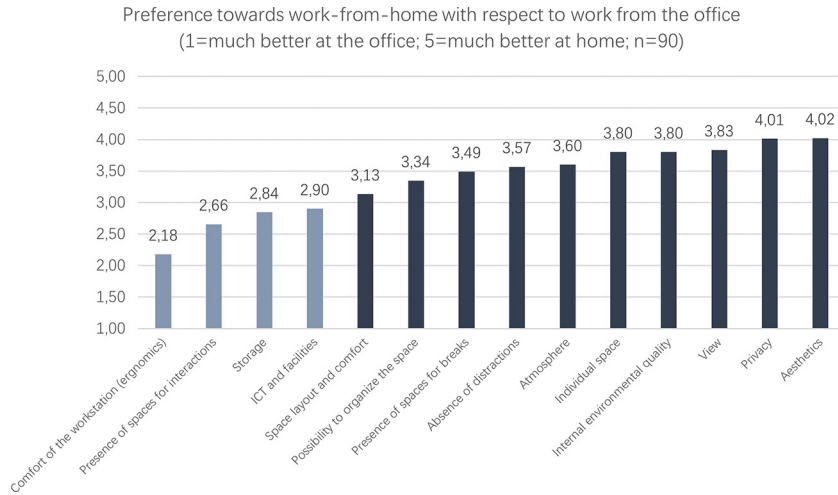
- storage availability for own items/work items (mean = 2.84; SD = 1.08); and
- ICT facilities (mean = 2.90; SD = 1.07).

Regarding the extent of change that was embraced by Mondadori's employees, at a first glance it looks like Covid-working has been a disruptive experience as the usual time spent in the office has been almost totally converted into WFH. Nevertheless, the employees tried to use their homes similarly to their workplace, and this probably functioned as an adaptation strategy. During Covid-working, the respondents reported that they use predominantly one single room at home for working (either the living room, the kitchen or a study room). This attitude resembles their habits in their corporate environment before Covid-19 when, according to our results, they would barely move to meeting rooms (means = 1.133; SD = 1.192, Never = 0, Always = 4) or other support spaces (Means = 0.267, SD = 0.716).

Also, not many respondents lamented sharing the room with other households. This could be explained by the fact that they used to work in a shared environment also prior to Covid-working. 78.9% of employees would always use a workstation in a shared room at the company HQ (mean = 4.39; SD = 1.35). This might explain the limited need for private environment to work at home that emerges in open ended questions [5]. Moreover, the fact that workspaces at home are mainly shared with other adults (e.g. partners) might imply simpler negotiation for privacy than with children. Research mentioning control and appropriation strategies as a workspace satisfier might support these findings (Vischer, 2008; Brown, 2009). Few exceptions show that when people needed to switch their environment at home, they experienced annoyance and discomfort:

> [I would like to] have a well-equipped studio where I can work permanently without having to move from one room to another according to the needs of the people I live with (Executive since 2020, woman, 60 y.o.).

Nevertheless, when asked in an open-ended question (27 blank; 63 completed) about future modifications of their houses to improve WFH, many employees extensively complained about multiple issues (Figure 2 for an overview). Only few respondents (only 16 mentions –

15%) revealed the need for a single work room to limit interaction with other people and prevent a loss in productivity due to distractions.

Some respondents stated that they want to create at home an ergonomic workstation to prevent posture problems (30 mentions – 29%), as well as improve lighting to reduce visual fatigue (5 mentions – 5%):

> I would like to create a workstation isolated from the rest of the house and set up for desk work (ergonomic seat, powerful connection, adequate desk, lighting [. . .]) (Employee since 2015, man, 31 y.o.).

Furthermore, 18 of the analysed open questions (17%) mentioned problems with ICT and tech-facilities at home. Some people specifically expressed the need for improving Wi-Fi connection. Other needed facilities are printers, external PC monitors, and dedicated cabinets to store paper documents. This confirms that WFH might entail a lack of resources that is likely to cause stress (Konradt *et al.*, 2003):

> I should buy a monitor of a certain size, because by working with a laptop I got eyes' problems (Manager since 1992, woman, 65 y.o.).

It is worthy to say that among the completed responses, some people (9) explicitly stated that they will not modify their WFH space, either because they do not want to: "I have no intention of changing my home for work" (Employee since 1990, women, 56 y.o.); or because they cannot:
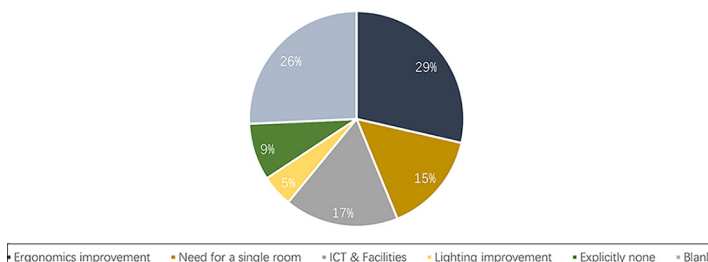
> It is impossible to change the layout of my house, I will be forced in the future to share the space with other members of the family (Employee since 1991, woman, 58 y.o.).

Outcomes of covid-working vs office-working

Figure 3 shows respondents' work outcomes of Covid-working compared to previous office-working. Most respondents ranked all the variables as improved during Covid-working.
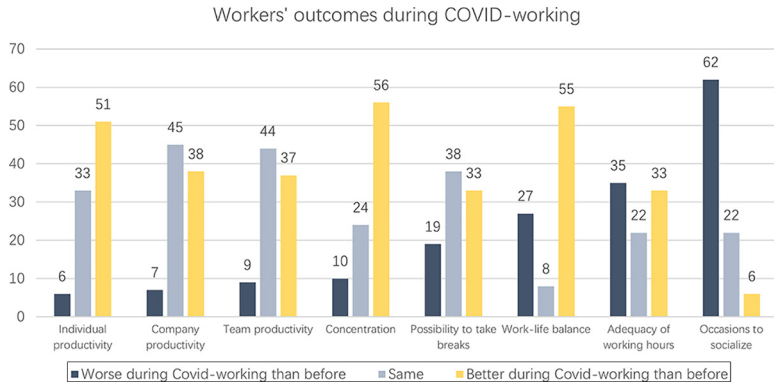
Indeed, they reached better balance between private and work life (mean = 3.54; SD = 1.39, 1 = worse than before Covid-19 outbreak; 5 = better during Covid-working), and had more possibility to take breaks, even if the adequacy of working hours has slightly decreased. Perceived individual productivity has been evaluated by the respondents much better than before (mean = 3.68; SD = 0.88) along with an increase in concentration (mean = 3.71; SD = 0.95). The perceived productivity of work-teams, as well as of the whole company, has been evaluated unchanged (mean = 3.36) by half of the workers, while the other half of the respondents stated that it is much better than before the Covid-19 pandemic. This might be due to an increase in working hours that was generally reported in the survey

Frequency of most mentioned requirements of WFH (n=105 mentions)

Ergonomics improvement · Need for a single room · ICT & Facilities · Lighting improvement · Explicitly none · Blank

Workers' outcomes during COVID-working

but also to better concentration capacity at home, as some respondents mentioned in the open-ended comments about work outcomes (26 completed; 64 blank):

> After a first short period of natural adaptation to the extraordinary condition, the quality of my work and of my team's has clearly improved. We took advantage of the increased concentration at home and for operational work and we held periodic online meetings to share projects and align on progress. I have also used one-to-one calls to monitor the psychophysical well-being of my people (Executive since 2020, woman, 60 y.o.).

Also, optimization in commuting routes might have contributed to perceived improvement in productivity – as in studies by Clark *et al*. (2020). Given the fact that the headquarters is situated in the metropolitan area of Milan (*Segrate* municipality), who lives closer to the centre needs to commute for about 30 minutes by car or 45 minutes with public transport to the office, wasting time and increasing stress. Some employees explained:

> I do a job that has few interactions within the company and much more [interactions] with the outside. Before I was always in the car, and moving back and forth the office, that is outside the city, was not easy at all (Manager since 1992, woman, 49 y.o.).

Nevertheless, some inefficiencies have been highlighted due to missed F2F interactions:

> There are aspects of remote (writing, project definition) with respect to which productivity has improved for the conditions of greater calmness. For other aspects it has worsened because certain decision-making steps are much slower, responses take more time and repeated contacts (Employee since 2007, woman, 49 y.o.).

Significant differences emerge among groups. Regarding the positive outcomes, *t*-test confirms that women scored significantly higher than men on work–life balance during Covid-working (p value = 0.109), individual perceived productivity (p value = 0.085), and concentration (p value = 0.067). These results resemble most of the literature on WFH as a policy for improving gender equality and empowering women work performances (Sullivan and Lewis, 2001). However, a negative impact on work-life balance emerge especially for workers with children "[...] the greatest difficulty was to combine the presence at home of young children with work" (Employee since 2007, female, 38, y.o.). No relevant differences show up across age groups and work types.

The data collected, though, highlight some negative aspects of Covid-working that should not be overlooked and that recall the most common challenges encountered by people in their first approaches to remote working (Giurge and Bohns, 2020). Two-thirds of the respondents say that opportunities for socializing with the colleagues have abruptly worsened (mean = 2.24; SD = 0.77,

1 = worse than before Covid-19 outbreak; 5 = better during Covid-working). In fact, about 70% of the respondents said that social relations reduced considerably compared to before the lockdown. Sociality and interaction issues are cited by 8 open-ended responses out of 26. Employees lost the informality of interactions and speed of communication without the possibility to meet F2F: "I feel the lack of a "non-virtual" socialization" (Employee since 2006, woman, 48 y.o.). It is worth mentioning that pure work interactions (unchanged in number) are definitely different from socialization at work (Gerpott *et al.*, 2017).

In the case company, when asked about the number of links to the colleagues' community [6], 59% of the respondents declared that work interactions with the colleagues have not changed compared to the period before Covid-19, while 33% of the sample said they have less contact with colleagues. Still, there is a residual percentage of employees (8%) who interact with colleagues more than before. This can be a reason why during Covid-working job satisfaction scored higher for older employees than for younger ones according to the ANOVA test (p value = 0.016). Indeed, according to literature, younger workers require physical collaboration for taking advantage of informal knowledge spill over – critical in the first years of the career (Gerpott *et al.*, 2017).

Overall, open-ended questions grasped the complexity of workers' perceptions. Among 26 completed open questions, half of the respondents (13) pointed out only positive aspects of this work arrangement, a few (4 people) found only negative effects, while the rest (9) found both positive and negative outcomes. The emerging challenges can be faced by taking the chance to change work policies and the related CRE strategies.

> I believe that a mixed remote working/presence formula (50%−50%) has become essential for the well-being of workers. (Employee since 2019, woman, 34 y.o.).

Takeaways from Covid-working: the good, the bad and the ugly

With Covid-working the workers of the case company drastically changed their habits. While this abrupt switch might generate difficulties in adaptation, this working practice was generally appreciated by this company's workers and confirms the positive outcomes attributed to WFH from previous studies (Morgan, 2004; Gajendran and Harrison, 2007; Pyöriä, 2011; Bloom *et al.*, 2015; Sarker *et al.*, 2012; Baruch, 2000; Pearlson and Saunders, 2001). Three macro-takeaways can be extracted from the survey that lead to recommendations for real estate strategies:

(1) *Multi-location of work*. Mondadori's employees have never taken advantage of work in multiple locations; however, the responses and comments to the survey suggest that this work mode could be appreciated. The company could consider embracing NWW soon.

(2) *New value for the headquarters*. Some specific physical environment variables determine employees' preference alternatively towards the first location (office) or the second (home), with a general preference for WFH. Nevertheless, the company's workers are equally engaged in individual and collaborative activities, the latter of which benefit from F2F encounters at the office. The management might want to consider a general revamping and restyling of the historical HQ to make it more attractive and conducive for both work and social encounters.

(3) *Diversity empowerment*. Some differences were detected between men and women and across generations regarding locations of work, workspace at home, reported productivity, concentration, and work–life balance. The company leadership should encourage further investigations to dig down into the risk of potential misalignments and discriminations and attune their workplace strategy to prevent them.

Multi-location of work

Multi-location of work appears as a promising workplace strategy that, in the long run, the company could consciously support to meet employees' needs. Together with other companies in the forthcoming years (Beaudoin *et al.*, 2020), Mondadori, would benefit from extending its workplace boundaries to spaces different than the corporate HQ, including but not limited to employees' homes. The idea of an extension of the activity-flexible office concept beyond the building's limits to the whole city is a likely future of the workplace, along with a system of services essential to support this ecosystem. Coworking spaces, for instance, can offer a suitable network of workspaces sparsely distributed with complementary services (Di Marino and Lapintie, 2018). A workplace policy that entails the use of workstations in various coworking spaces would accommodate the needs of several employees, including who uses the time saved for commuting to the office to work more effectively by avoiding the stress of traffic or public transport, who needs help to deal with children at home, who does not have the appropriate equipment or technological infrastructure at home and more.

These matters regard not only real estate management but also HR, ICT and communication strategies within the company, along with policymakers and Municipality authorities that can contribute with city planning in imagining the workplace of the future.

New value for the headquarters

The office is still a crucial location, but its function deserves to be challenged even if there is not yet a structured return-to-office policy in this company. Whereas WFH scores positive mainly for the absence of distractions and the individual possibility to better organize the available space, the HQ is likely to remain the privileged site for brainstorming and collaborative activities. Covid-working seems to be responsible for a change of the role and value of the office that is becoming exquisitely a place for meetings and social interactions rather than the sole place where all work activities should be performed. Indeed, employees perceived more positive work outcomes at home than at the office except for socialization that is different from strictly work interactions (which instead remain generally unchanged).

Therefore, spatial arrangement will need to boost creativity, to share and to produce knowledge (Kraut *et al.*, 2002), and to encourage chance and social encounters. For example, the actual layout (i.e. an open space office) could improve its function if complemented with some spaces and facilities specifically devoted to collaboration (e.g. meeting rooms, small break areas, etc.).

Programming and design strategies should focus also on improving the aesthetics of the space, privacy, indoor environmental quality, and external views, as all these factors scored lower at the office compared to WFH arrangements.

Diversity empowerment

The importance of research and evidence-based analysis to profile workers' various needs emerges from the differences detected across men and women and age groups in this investigation. According to our results, Covid-working has confirmed positive outcomes. Even if in their first experiment of WFH, most of these employees (nearly 90% of the respondents) show to have taken the most out of it, but there are exceptions.

On one hand, Covid-working led to the opportunity of flattening out differences, for example the pre-Covid digital divide between younger and older employees progressively disappeared in this case company. On the other hand, Covid-working imposes some inequalities that affect especially women and younger workers and confirms other recent research (Kniffin *et al.*, 2021). In spatial terms, women have lower access to the HQ and to clients' offices than their male colleagues. When at home, on average, storage, ergonomics, and privacy scored lower than at the office but differences emerge depending on house size and the availability of appropriate

equipment. For example, younger employees that have smaller houses worked mainly from their bedroom in absence of a dedicated space to work. Increased working hours confirm the general convincement that when working outside the strict boundaries of the office, work tends to invade the other life spheres (Felstead, 2012). This happens more frequently for younger employees – that in our sample live mainly alone – than to older ones who are busy with family.

It would be worth to push forth studies digging into these differences, which could enable workplace strategies tailored for different employee groups to empower diversity of needs and preferences.

Conclusions

The Covid-working phaenomenon is complex and is still underexplored due to its novelty and uniqueness. Two main issues were discussed in this paper: the extent to which Covid-19 has affected the work habits and outcomes in the case company; and implications on future CRE and work policies. The results derive from a small sample size which allowed only for descriptive statistics, therefore future studies applying more robust methods are desirable to improve generalizability. As the Covid-working phaenomenon is ever evolving, a longitudinal approach is recommended. Nevertheless, this research allows some initial reflections.

In the case company, the current Covid-working practices abruptly changed the traditional work from the office approach to pure WFH. This might be a condition shared by other companies based on data from OECD (2020) and could allow for generalizability of some of the results and takeaways that this research presents.

Positive and negative outcomes of Covid-working confirm previous studies on remote working. Thus, this research adds to debate on WFH and flexible work arrangements. At the same time these findings stress the value of existing HQs as collaboration and socialization hubs and invite companies to rethink their key functions and layouts, which contributes to CRE literature.

While NWW, implying multi-location of work, has not been exploited to date in the case company, these investigations suggest that it might be considered as a foreseeable option to leverage negative outcomes of WFH (i.e. socialization, work–life balance and lack of work facilities at home). This opens up new research streams on how to design a more sustainable geography of working spaces (including temporary offices, coworking, etc.).

In sum, Covid-working emerges with pros and cons that should both be acknowledged in future real estate strategies in greater details to enhance diversity and inclusion. Questioning on established work practices and workplace arrangements, while deeply investigating the diversity of workers' needs and preferences, is an opportunity that Covid-working urged to take. This evidence-based approach is precious to inform real estate strategies and work policies and deserves to remain in the future.

Notes

1. Available at: www.mondadori.it/

2. The questionnaire asked to rate with a five-point Likert scale (1 = never; 5 = always) how frequently workers use: "study used only for work"; "own bedroom"; "another bedroom (e.g. children's bedroom)"; "kitchen"; "living room"; "transit zone (e.g. entrance hall, corridor, etc.)"; "multifunctional space"; "private garden/yard/terrace"; "shared garden/yard/terrace").

3. The questionnaire asked to rate with a five-point Likert scale (1 = never; 5 = always) how frequently workers share their workroom at home with: "adult people"; "teenagers (from 14 to 17 years)"; "children of school age (from 6 to 13 years)"; "pre-school children (from 0 to 5 years old)".

4. The questionnaire asked: "how much are you satisfied with your house as a workspace?" Responses ranged according to a Likert-type scale from 1 = totally unsatisfied; to 7 = totally satisfied.

5. The questionnaire asked: "how would you rate your workspaces at home compared to the spaces that are/were available at your workplace?" Items were recorded on a Likert type scale with responses ranging from "1 = much better at the office" to "5 = much better at home". The items include: "ICT and tech-facilities"; "Presence of spaces for breaks"; "Presence of spaces for interactions"; "Possibility to organize the space (customisation, etc)"; "Absence of distractions"; "Privacy"; "Individual space"; "Storage availability for own items/work items"; "Inspirational workspace (e.g. atmosphere, colours)"; "Functionality of the workspace (layout)"; "Comfort of the workstation (ergonomics)"; "Indoor environmental quality (e.g. temperature; light; etc.)"; "Aesthetics of the workspace"; "Outside views".

6. The Links component of Job Embeddedness (Mitchell *et al.*, 2001) includes the following items: (1) How many coworkers do you interact with regularly? (2) How many work teams are you on? (3) How many work committees are you on? (4) How many coworkers are highly dependent on you? Responses ranged from "1 = less than before COVID-19" to "3 = more during Covid-working"

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Further reading

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