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Working from home beyond Covid-19: technology – friend or foe?

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Abstract. As the world aims to start ‘getting back to normal’ following the hopeful decline of the pandemic, many organisations and employees are questioning whether they will ever return to the old normal, where work for many was conducted within a designated office space. Drawing upon data from a wider study utilizing diary data of 29 participants that was conducted in the early stages of the lockdown, this short paper aims to highlight findings that not only suggest that individuals struggled with managing technology and work, but also that individuals were beginning to develop more control over their use of technology. This short paper ends by highlighting future research that the authors aim to develop.

Keywords: working from home, technostress, qualitative research

1 Introduction

Covid-19 needs no introduction, and the impact of the pandemic and subsequent lockdowns is all too well-known and experienced by many people globally. The way life and work were traditionally conducted underwent a transformation where organisations and employees around the world had no alternative but to adapt to new working conditions: technology has been pivotal in normalising the work and life routines of individuals during this very unique situation [1, 2].

The ‘battle’ that homeworkers have when it comes to technology is well-documented in the pre-Covid homeworking literature. The ‘dark side’ of IT use has received significant research attention with two key themes remaining consistent over time with regards to IT-enabled patterns of work and collaboration – “that of quick and easy information access and flexible work patterns vs. addiction, misuse, overuse, overload and stress brought on by IT usage” [3, p. 270]. The benefits and drawbacks cited in earlier literature and that cited in more recent homeworking literature that has transpired since

Covid-19 have similarities: the benefits could often be turned on their heads. For instance, increased productivity was deemed a key benefit of working from home, and from a different perspective can be perceived as a negative as individuals become 'over-productive' due to their inability to switch off from Information and Communication Technologies (ICTs).

Whilst a notable amount is now known about individuals' experiences whilst working from home (WFH) during the pandemic, there is potential to explore what their experiences are now that the pandemic's grip seems to be easing. Currently, there is uncertainty of what the future of work will look like: there is some speculation that some organisations and employees will not return to the 'old normal' working styles where work was influenced by time and space [4]. Thus, questions persist, including what are the challenges and impediments faced by individuals and what is the role of technology? As Herath and Herath [2] state: is technology a boon or a bust?

The aim of this short paper is to explore homeworkers' relationship with technology whilst WFH due to Covid-19 and how this has changed in terms of individuals' perceptions and usage of technology for work purposes. This study is currently in its very initial stages: the authors had conducted a wider study examining how homeworkers managed technology-enabled social interaction with colleagues whilst at a distance [5]. It was during this study that a key theme began to emerge which – although not fully integrated into the main, wider study – appeared to be significant in that homeworkers were demonstrating changes in how they perceived and used technology. Thus, the aim of this paper is to demonstrate such changes using findings from the main, wider study and, subsequently, consider how the authors can explore this theme in a future study. The data was collected during the height of the pandemic.

2 Literature Review

When WFH during the pandemic, individuals were overwhelmed with the technology dominance of all things work-related. The role of technology has come to the forefront during the pandemic as online applications have enabled the continuity of personal and business activities [6]. Presently, in the Information Systems/Management area, there is much speculation, expert opinion and suggestions for research and theory in relation to the longer-term implications of Covid-19. The initial stage of immediate panic and high levels of change required to adapt working practices has now passed: organisations and employees have managed to adapt working practices to function remotely using collaborative tools such as Microsoft Teams and Zoom [7].

The relationship that employees have with technology has been studied for some years, particularly given that ICTs have become so embedded in day-to-day life. ICTs have become increasingly "complex, real-time, ubiquitous, and functionally pervasive, often requiring users to process information simultaneously and continually from different applications and devices" [8, p. 304]. This results in multiple challenges for individuals, such as having to deal with a surplus of information, frequent interruptions from – and multitasking on – different devices and applications [8].

Whilst the use of technology facilitates completing tasks, it puts much pressure on employees [9]. This has the potential to result in individuals feeling stressed by ICTs, a phenomenon known as ‘technostress’ which is the “stress experienced by end users in organizations as a result of their use of ICTs. It is caused by an individual's attempts to deal with constantly evolving ICTs and the changing physical, social, and cognitive responses demanded by their use” [10, pp. 417 – 418]. In addition to the factors mentioned by Tarafdar et al. [8], other factors that can create technostress include: constant connectivity which can extend the working day, employees being contactable anytime and anywhere, and communication overload due to several mobile communication tools and software resulting in individuals feeling overwhelmed [10]. This can result in increased expectations for individuals to work faster and harder and can have an adverse effect on individuals’ ability to make timely decisions [9]. Remaining available anytime and anywhere not only extends individuals’ working day and responsiveness to work tasks, but this ‘techno-invasion’ can lead to personal tensions as a result of work creeping into personal time [9].

As research increases on the impact of homeworking and technology-induced stress during the Covid-19 pandemic, there are clearly different views emerging in light of complex social and organisational factors at play. For example, the likelihood of individuals suffering from workaholism – working excessively hard, being obsessed with work and not respecting the boundaries between home and work [11]; the use of social media to communicate with colleagues for formal and non-formal purposes and the impact on technostress and work exhaustion [12], and understanding the relationship between level of satisfaction when WFH and levels of technostress [4]. The contrasting perspectives in the literature, the range of ICTs available and the fact that that some individuals have now been WFH for over two years makes exploring the relationship between homeworkers and technology a fruitful avenue for further study.

3 Methodology

This study was part of a wider exploratory study utilising the diary-keeping technique [see 5]. Participants completed daily diary entries over a period of ten working days with respect to their homeworking experiences; this included questions about their working hours, their feelings about working remotely each day and their technology use. Not only did this offer an insight into participants’ everyday lives as it naturally unfolded [13], but respondents were able to record responses on the day. Diaries were kept between May and June 2020 during the height of the lockdown. Participants were asked to complete an additional information sheet which provided details such as demographic data. Having a record of daily experiences helped the researchers to develop more of a context to each participant’s responses. Participants were recruited using a snowballing sampling technique. Diaries were completed by a total of 29 participants. Data was analysed following guidelines by Miles and Huberman [14]: a contact summary sheet, summary sheet, coding, causal diagrams and a matrix of the demographic information.

4 Findings

15 males and 14 females participated in this study. 17 participants were located in the UK, four in India, three in the USA, two in Germany and one each in Nepal, Canada and Luxembourg. Occupations of participants were varied and included: Web Administrator and Digital Marketer, Software Developers and Academics. Nine participants had never worked from home before the pandemic, whereas 20 participants had. All participants said they had a heavy workload which seemed to have escalated during the shift to working from home. technology usage also rose hugely given the nature of the pandemic. The key findings relating to technology use are highlighted below with some indicative quotations from the participants' diaries.

4.1 The changing nature of work

A key finding from our study was that work had become a lot more functional: the absence of travel, face-to-face interactions and office-based work meant that several daily routines were omitted – e.g. travel and workplace interactions – which can traditionally be said to constitute an important part of the working day. Now, individuals fit in informal chit-chat with colleagues before/at the end of meetings and, in some cases, were able to keep informal chats going throughout the day via applications such as MS Teams:

Participant 14 (male, 25-34 years, Software Developer): *“I feel like the proportion of casual/personal conversations I am having with colleagues is a lot smaller when working from home (i.e. nearly all conversations are about work matters). For example, today all messages I exchanged with colleagues were about work. Without the casual conversations to break the day up, it can give the work day a more serious feel”*.

4.2 Developing a balance between home and work-related technology use

In general, participants tried to develop a balance between work and home which helped with managing technology use. For example, Participant 29 (25-34 year old female, Policy and Projects Co-ordinator in local Government) stated the difficulty in trying to strike a balance during each of the ten days' diary entries:

Day 2: *“I'm sat at the computer for so long that I've been feeling it over the last few weeks” which was leading to physical health problems and affecting sleep.*”

Day 3: *“I am trying to be very mindful of the stress that work is creating for me at the moment, especially as things are moving to a manageable pace...I am now booking in some days off and trying to create more manageable hours for myself compared to the 10-12 hour shifts I had been doing at my computer in the first month or so of the lockdown.”*

Participant 27 (male, 25-34 years, Data Analytics Manager, Financial Services) stated the difficulties associated with being connected across time zones and via multiple collaborative platforms throughout the diary entries as well as the opportunity to attend to home commitments. On day 10, he added: *“I may come across as someone who is negatively biased towards remote working concept, but to be honest my experience has*

been evolving with every single day of the lockdown or rather since 13th March [2020] - 1st day when my company enabled “remote working” across the organisation. The time and experiences encountered since Day 1 compared to Day 50 to Day 100 (and still counting) has allowed and enabled me to become an individual who is not only more flexible than what I used to be 3 months back but has also helped me to be more prepared for such situations in future”.

4.3 Managing communication via social media technology

Some participants who had taken up social media communication to retain informal communication with colleagues began to reconsider whether they wanted to continue partaking in such communication. This could prove difficult given that some participants had shared their personal mobile number with more colleagues since the lockdowns. For example, Participant 20 (female, 35-44 years, Researcher):

Day 1: “someone from another dept has created a whatsapp group. It has people I have never really interacted with before, except for the casual ‘hi’ in the corridor when we were on-site. It’s okay, some funny things shared”.

Day 7: “I decided to leave [the Whatsapp group] and I am so happy. I’ve started managing [other informal colleague communication] better because I ignore their messages after about 9pm”.

4.4 Balancing technology and work: an ongoing challenge

How individuals manage technology that is ubiquitous is an ongoing challenge for many. In addition to the issue of sharing personal mobile numbers with more colleagues and engaging in social media interaction with more colleagues, there were other issues that participants had to contend with when working remotely via technology instead of in a designated office space. For example, Participant 19, male, 45-54 years, Head of Service, ICT) highlighted the volume of communication via multiple applications which had to be managed. He stated how his working days have adjusted to enable more video conferences throughout the day which leads to less time for emails and thus a backlog of emails. He also added: *“Made family members understand that noise is amplified during conference calls. They now take out kettle etc and use it in lounge”.*

Participant 7 (male, 25-34 years, Key Account Manager) was one of the participants who highlighted the problem with being too contactable: *“my team leader called me and asked me to help him with an analysis that needs to be done today by the end of the day and in a short amount of time, he expected me to finish it, however, his requirement was not really clear and that’s why I needed more time. After 2 hours he kept sending me messages via teams on updates. At some point I felt like I was going crazy”.*

4.5 Technology-enabled work as a ‘barrier’ from workplace

There has been a shift in how people relate to technology-enabled work and that shift may be regarded as positive in some cases. For instance, although some participants may have missed the face-to-face interaction with colleagues and the office facilities, others stated the benefit of being able to focus on work when returning to the office on an ad hoc basis:

Participant 7 (male, 35-44 years), IT/Software Professional): *“Today I went to office on need basis, though limited folks critical for project only could come to office, but felt good being in office premise and working at comfort of office desk. And it was productive also than regular days. Being in office without wasting time on office chit chat 😊 (as no one to chit chat on politics or social issues)”*.

The issue regarding distancing oneself from organisational politics when working from home was mentioned by other participants, including Participant 4 (female, 25-34 years, Research and Evaluation Officer): *“...having space away from colleagues in a complex political issue means I could respond rather than react, and not be pressured by the immediacy of an in-person interaction” although she also added at times she felt “very tired from overwork...and internal politics adding to projects”*.

5 Discussion and Conclusion

There seems to be a wide range of aspects that the diary entries have thrown up, many aspects of which merit further study. In the main study, where the focus was on how homeworkers managed social interaction with colleagues using technology, a somewhat unanticipated finding was how homeworkers’ perceptions and usage of technology (beyond that for social interaction purposes) changed. Thus, this short paper only touches upon this theme by presenting some findings related to it. In so doing, the authors wish to use this as a starting point on which to investigate this topic further and would welcome the comments of the conference delegates with regards to advice on relevant theoretical frameworks/theories that may be used to contextualise a future study specifically dedicated to this theme. The brief literature review suggests that technology has often played a stressful role in homeworkers’ lives. Indeed, some of the findings in this short paper can concur with this perspective. However, the findings also suggest that individuals are able to form new behaviours and habits, which can ultimately affect how they perceive and use technology.

Even given the term ‘technostress’ suggests negativity throughout, the reality of a change of working mode is not black and white: e.g. what is regarded in some contexts as positive by some people is regarded rather negatively by other people as negative. This is reflected by the findings, identifying barriers but also balances. Investigating these dynamics more thoroughly is essential for devising recommendations – both in professional as well as private contexts – on how to allow technology into our lives (or not).

For instance, if work is now being perceived as more functional as suggested in the findings, especially given the lack of in-person interactions, then this can affect not only

the way in which work is perceived, but also how the tools provided in order to fulfil work tasks are perceived and used – i.e. as a means to an end. The findings also suggest that individuals are trying to develop more of a balance between work and home which is also affecting the time spent on computers which had previously affected them adversely. Also, the longer someone spends working from home, it appears the more ‘in control’ they can become not just of their work and home lives, but also how they perceive the whole notion of ‘work’ and what it means to them. This feeling of developing a balance/control can explain why some individuals perceive technology as a barrier/shield to internal politics and distractions from colleagues which enabled them to focus on their work and, thus, reinforces the notion of work becoming more functional. It goes without saying that it is never the same story with everyone in that the degree to which individuals are able to develop this notion of ‘control’ depends on many factors. Therefore, in future research, it is planned to investigate the impact of WFH on an individual more holistically, i.e. at the professional, emotional, cultural and individual level. It is expected that these different strands/levels are interdependent and can only be understood properly holistically rather than in isolation.

Cultural situatedness, which has been investigated in some contexts, for example in e-learning [15], should ideally be investigated in a wider range of technology-related scenarios. To this end, thick description [16] and in-depth qualitative study seems most appropriate, as well as maximising the breadth of contexts covered. Insights into this are likely to lead to a more satisfying – and even humane – use of technology in our lives.

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