

Changes to working practices in medical communications during the COVID-19 pandemic: Insights from two surveys

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Abstract

Successive waves of COVID-19 have altered opinions and working practices. We conducted a survey in early 2020 among 759 members of the medical communications community, recruited via our network, seeking their experiences, opinions, and insights. The survey was repeated 13 months later (N=925 respondents) using similar methodology. In both surveys respondents had a generally positive attitude to homeworking and appreciation for the lack of commute and time saved. In contrast, distractions in the home, inability to “switch off” at the end of the day, and concerns about potential impact on career development and/or connections with colleagues were highlighted. Notable findings include working longer hours as the pandemic progressed and an increase in feelings of isolation and loneliness in comparison to before the pandemic. Companies generally appear not to have used the time since the start of the pandemic to formally define home or hybrid working, including consideration of workplace health and safety requirements.

Introduction

Early in 2020, we left our offices to work from home.¹ Changes were introduced hastily, with little time for contemplation or preparation. Our work lives suddenly included information technology (IT) issues and balancing home-schooling, barking dogs, and fitting multiple “at-home” workers into cramped spaces.² The impromptu interruption of Professor Robert Kelly’s live BBC interview by

his daughter became synonymous with our shared experience.³

COVID-19 fundamentally changed our working world. Collectively we believed the changes were temporary, except weeks soon stretched into months. The authors conducted a multifactorial survey during the first lockdown to investigate how well we had adapted to our new, remote working environments.² The survey reported that most respondents felt they had



adapted positively and yet many were feeling lonely and isolated, with some adopting unhealthy lifestyle habits.²

With the immediate crisis subsiding, one thing is eminently clear: we are not the same. We look and speak the same, and some may be returning to the same offices. Yet the way we view the world has changed fundamentally, perhaps permanently. The 2020 survey's overwhelming consensus – that we would not return to the old ways of working – appeared to be substantiated when the introduction of vaccines and the easing of lockdowns did not see a tide of commuters returning to the office. We ran a second survey 13 months after the first to discover whether, given time for our working practices to evolve, we had addressed the challenges associated with remote working that were expressed at the height of the pandemic.



Methods

Study design and procedure

Two confidential online surveys were developed in English using Google Forms, which enabled secure and anonymous data collection.⁴ Voluntary completion was considered to signify consent for participation in the research. The surveys followed similar designs: the first was conducted from May 20 through June 11, 2020;² the second was conducted from July 24 through August 16, 2021. In both cases, potential participants were approached by email with a link to the survey, through the authors' professional networks. The surveys were also publicised on social media platforms. The clearly described aims of the surveys were to better understand the changes and challenges faced by home workers during the pandemic.

Questionnaires

Both questionnaires were designed to be completed in under 10 minutes and followed an evidence-based model developed by the UK Department for Works and Pensions to examine well-being in the workplace. The model's components included health, relationships, security, environment, and purpose.⁵ We also included an assessment of anxiety by employing adapted elements of the Generalised Anxiety Disorder Scale (GAD-7).⁶

The surveys differed slightly in the information they collected. The first survey included 50 multiple-choice, fixed-response questions and four free-text entry fields. The second survey included 54 multiple-choice, fixed-response questions and three free-text entry fields. Both surveys followed the same format and were divided into seven sections:

1. survey aims;
2. demographics;
3. workplace;
4. emotional health;
5. the working-from-home experience;
6. the psychosocial impact of working from home; and
7. views on positive/negative aspects of the lockdown, recommendations, and learnings.

The demographic questions collected basic personal and professional data. Subsequent

sections followed a standard five-point Likert-scale approach using a randomly selected mixture of positive and negative bias.

Data analysis

Our analysis methods have been described previously.² In brief, participant responses were collected automatically and exported into a Microsoft Excel spreadsheet. After harmonisation, quantitative data analysis was performed using IBM Statistics SPSS 25.⁷ The responses for each of the five Likert grades were counted and calculated as a percentage. After reviewing responses to Q8 ("What is your job title"), data were transformed into a new metric variable where responses were identified as being either "medical writers/editors", "VP [vice president]-level managers or executives", or "other". Negative questions were reversed for better interpretability. Where entries were not provided, the data fields were left blank. Free-text responses were scored according to the number of respondents mentioning specific points. The Mann-Whitney *U* test was used to test for differences between groups.

Results

Overview

There were 759 respondents in the first survey (S1). Most were women (71.4%) and based in the UK (76.8%) (Table 1). The second survey (S2) included 925 participants who were mostly women (66.6%), with proportionally more respondents (vs. S1) from outside the UK (39.1%). The two survey cohorts shared similar characteristics.

Employment and roles

A high proportion of the respondents were engaged in the medical communications/education/publishing industry (S1, 67.1%; S2, 49.4%) and had been in their role for 1–5 years (S1, 42.8%; S2, 39.5%) (Table 2). Most respondents were employed (full-/part-time: S1, 75.5%; S2, 80.3%). There were more freelancers in the first survey (25.6%) than the second (19.7%). The largest group comprised medical writers or editors in the first survey (39.9%) whereas, in the second survey, the

The clearly described aims of the surveys were to better understand the changes and challenges faced by home workers during the pandemic.

Table 1. Survey participant sociodemographic characteristics

		S1 - 2020 (N=759)		S2 - 2021 (N=925)	
		n	%	n	%
Sex	Male	217	28.6	309	33.4
	Female	542	71.4	617	66.6
Age	<25 years	43	5.7	48	5.2
	26 – 30 years	104	13.7	105	11.5
	31 – 40 years	161	21.2	212	22.9
	41 – 50 years	216	28.5	234	25.3
	50+ years	235	31.0	326	35.2
Domestic status	Married / living with partner	584	76.9	718	77.6
	Single	137	18.1	155	16.8
	Lone parent	25	3.3	21	2.3
	Other	13	1.7		3.3
Accommodation	Own home	579	76.3	718	77.6
	Renting with others	74	9.7	97	10.5
	Renting alone	63	8.3	63	6.4
	Living with parents	29	3.8	34	3.7
	Other	14	1.8		3.4
Living with children	No	466	61.4	666	72.0
	Yes	290	38.2	352	28.0
Location	United Kingdom	583	76.8	632	61.9
	Canada and USA	67	8.8	104	11.3
	Europe (not UK)	71	9.4	102	11.0
	Other	38	5.0	86	9.3

largest group comprised vice presidents and directors (35.4%), although both surveys reported similar proportions with managerial duties (S1, 56.0%; S2, 47.5%).

Commuting and homeworking

Before lockdown, although most commuters faced journeys of 30–60 minutes, many spent a longer proportion of their day (>60-minute commute) travelling (S1, 19.1%; S2, 21.2%). In both surveys, freelancers were generally working from home before lockdown, as were a number of employed respondents (Table 2). Over half of the survey participants had the option to work away from the office occasionally before the pandemic (≥ 2 days per week; S1, 58.6%; S2, 56.0%) but most were not availing themselves of this opportunity consistently (Table 2).² At the time of both surveys, the majority of respondents were working from home (S1, 97.1%; S2, 93.1%).

Homeworking during lockdown generally

went unregistered formally with employers, landlords, and insurance companies raising legal and safety concerns regarding the work spaces adopted by employees. For example, by the time of the second survey, only 15.1% had informed their insurer, 7.2% their landlord, and 5.2% their mortgage providers of their change of status. Overall, 22.1% had informed a combination of potentially interested parties but only rarely had they confirmed their reporting with employers (5.3%).

Working hours and finances

The survey data strongly suggest that many of us were working for longer hours than before the pandemic and often at times outside of usual contractual hours (Table 2). The number of respondents who reported being busier than

before the pandemic increased significantly from 63.9% in the first survey to 77.8% in the second ($P<0.001$). This observation was substantiated by

At the time of both surveys, the majority of respondents were working from home (S1, 97.1%; S2, 93.1%).

the number of working hours respondents reported, most notably with a marked shift between the two surveys in the proportion of those working over 40 hours a week (S1, 21.7%; S2, 42.2%; $P<0.05$). Furthermore, over a quarter (27.9%) of responders in S2 reported delivering >10% of their work outside of standard office hours;

with 27.6% delivering up to 10% and 33.3% up to 5% of their work outside standard hours. The proportion of respondents who considered themselves to be worse off during the pandemic was lower in the second survey (8.8%) than in the first (17.9%).

Table 2. Responder work profiles

		S1- 2020 (N=759)		S2- 2021 (N=925)	
		n	%	n	%
Which part of the industry do you work in?	Medical communications/ education/publishing industry	509	67.1	457	49.4
	Biomedical, pharmaceutical, or device industries	127	16.7	237	25.6
	Clinical research organisation	84	11.1	104	11.3
	Other	39	5.1	127	13.7
Time in current role	<1 year	145	19.1	193	21.6
	1 – 5 years	325	42.8	395	39.5
	6 – 10 years	101	13.3	148	16.0
	10+ years	187	24.6	189	20.4
Weekly hour worked	<15 hours	18	2.4	11	1.2
	16 – 29 hours	101	14.5	88	9.5
	30 – 40 hours	465	61.3	424	46.0
	40+ hours	165	21.7	394	42.2
How busy have you been during the pandemic?*	Busier than ever before	270	35.5	423	45.9
	Relatively busy	215	28.4	294	31.9
	No different than before the pandemic	157	20.7	162	17.5
	Some of the time	85	11.2	37	4
	Never	32	4.2	6	0.7
Employment status	Full time	493	65.0	658	71.2
	Part time	71	9.4	84	9.1
	Self-employed/Freelancer	194	25.6	182	19.7
Job Description/Role	Medical writer or editor	303	39.9	263	28.4
	Vice President or Director	284	37.4	328	35.4
	Other	172	22.7	303	32.7
Managing others		425	56.0	439	47.5
Financial status	No change in status	623	82.1	843	91.2
	Financially worse off (All)	136	17.9	82	8.8
	Freelancers (S1 = 194/S2 = 185)	70	36.1	28	15.1
	Non-freelancers (S1 = 565/S2 = 739)	66	11.7	54	7.3
Primarily homebased working before lockdown	Contractors / freelancers	153 / 194	78.9	152 / 185	82.1
	Full-time employees	51 / 565	9.0	94 / 922	10.2
Occasional working from home before lockdown ^a		445	58.6	519	56.0
Working from home at the time of the survey		738	97.1	861	93.1

^aOption to work from home at least 2 days per week. *P<0.05 comparing 2020 with 2021 data

Table 3. Responses to questions on working from home environment, feelings of self-worth, the homeworking experience, and work-life balance

Considerations on their feelings of self-worth						
S1 Q#/S2 Q#		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Valued Q38/44*	2020	27.9%	45.3%	14.1%	9.4%	3.3%
	2021	52.5%	30.0%	7.3%	6.8%	3.3%
Engagement Q34/37	2020	25.4%	47.0%	19.2%	7.5%	0.9%
	2021	27.4%	50.4%	8.3%	12.7%	1.2%
Recognition Q35/42*	2020	17.9%	37.9%	27.0%	13.2%	4.0%
	2021	49.2%	30.5%	8.6%	8.9%	2.7%
Motivational Q30/36	2020	22.3%	36.0%	25.6%	13.5%	2.6%
	2021	14.3%	47.4%	14.9%	19.8%	3.6%
Considerations of their experience of working from home						
Daily routine Q47/52*	2020	21.3%	48.3%	14.7%	12.7%	3.0%
	2021	18.7%	46.7%	21.0%	11.4%	2.2%
Workload Q31/19*	2020	35.5%	28.4%	20.7%	11.2%	4.2%
	2021	45.9%	31.9%	17.6%	4.0%	0.7%
Concentration Q42/47	2020	15.0%	39.0%	19.5%	19.4%	4.2%
	2021	17.0%	43.5%	14.2%	15.2%	1.7%
Productivity Q26/41*	2020	32.5%	37.6%	12.6%	13.4%	4.0%
	2021	39.4%	46.7%	8.2%	5.1%	0.7%
Considerations of work-life balance and lifestyle behaviours						
Desk eating Q43/48*	2020	31.0%	33.3%	12.7%	13.6%	9.5%
	2021	13.5%	18.5%	14.0%	28.9%	25.1%
Lunchtime Q44/49	2020	9.5%	25.7%	20.6%	31.3%	20.8%
	2021	4.7%	22.4%	23.1%	33.3%	15.8%
Alcohol intake Q45/50*	2020	26.1%	26.6%	15.5%	25.1%	6.7%
	2021	5.1%	17.3%	17.0%	28.3%	32.2%
Exercise Q46/51	2020	19.9%	24.9%	11.5%	25.7%	17.9%
	2021	14.5%	27.3%	12.9%	25.9%	19.4%
Gen health anxiety Q40/45	2020	37.2%	42.4%	9.3%	10.2%	0.9%
	2021	44.2%	42.3%	8.1%	4.7%	0.8%
Social media Q48/53	2020	11.8%	31.1%	23.2%	27.2%	6.6%
	2021	4.5%	28.2%	23.3%	30.6%	13.3%
Isolation Q41/46*	2020	5.6%	22.5%	15.9%	35.2%	20.8%
	2021	11.6%	34.0%	15.2%	23.4%	15.8%
Work-life balance Q50/17*	2020	21.4%	48.2%	14.7%	12.7%	3.0%
	2021	13.4%	34.5%	18.3%	27.2%	6.6%
Relationships Q49/54*	2020	6.9%	19.7%	44.8%	24.0%	4.6%
	2021	5.8%	17.4%	45.5%	25.2%	6.1%

Dark blue shaded areas = modes*P<0.05

- Q38/44: I don't feel valued.
- Q34/37: I feel engaged and able to contribute to team decisions.
- Q35/42: I am getting less recognition for my hard work and effort.
- Q30/36: I find working from home motivational.
- Q47/52: I have been able to establish a good daily routine.
- Q31/19: I have been busier than ever during the pandemic.
- Q42/47: I find it easy to concentrate.
- Q26/41: I have found myself working less productively during the pandemic.
- Q43/48: I eat lunch at my desk more frequently.
- Q44/49: I take more time for lunch.
- Q45/50: My alcohol consumption has increased since working from home.
- Q46/51: I worry that I am taking less exercise now I am working from home.
- Q40/45: I have been anxious about health issues
- Q48/53: I am spending more time on social media.
- Q41/46: I have felt lonely and isolated
- Q50/17: I have managed to keep my work and domestic life separate
- Q49/54: I have felt less strain in my relationships

Information, equipment, and safety

Most respondents (>90% in both surveys) felt that they had ready access to the information they needed to do their job. Similarly, most considered that they were appropriately equipped for homeworking (S1, 87.7%; S2, 85.4%). The second survey also asked participants to provide information on the facilities available to secure equipment that might contain potentially sensitive client information. Absence of safe storage was reported by 42.2%.

Health and safety at home was highlighted as an issue in the first survey, with only 15.2% of respondents having been asked by their employer to complete a formal health and safety assessment of their workspaces. This had increased to 43.9% by the time of the second survey, and over half of the respondents (56.1%) had received some guidance on health and safety while working from home.

Interacting with colleagues and clients

Data in Table 3 and Table 4 suggest that most respondents during both survey periods were able to work well from home, interact with colleagues, and serve their clients. These findings mirror the free-text statements that demonstrated a generally positive view of arrangements during lockdown.

The second survey also included questions regarding how concerned respondents would feel if they were expressly required to travel to a face-to-face meeting. More than half (63.9%) felt comfortable with such a request, despite the majority (88.4%) reporting that they had not had COVID-19. This appears to coincide with fewer than half being concerned about their own health during lockdown.

Opportunities for training

In the first survey, a third of respondents felt that they had experienced reduced opportunities for training and growth, but this had dropped to under a quarter by the time of the second survey ($P<0.05$) (Table 4).

Work-life balance and lifestyle behaviours

In the first survey, most respondents indicated that during lockdown they had established a good daily routine, remained productive, managed their (increased) workloads, and felt supported (Table 3). Approximately 20% reported experiencing difficulties with concentration. Most (84.3%) felt that they had not experienced any issues keeping their work and domestic lives separate. However, this value was lower in the second survey (66.2%,

$P<0.05$). Marked differences in the reporting of "eating at the desk" ($P<0.05$) appear to corroborate a change in working patterns and workloads. The data did not indicate widespread adoption of negative behaviours in terms of consuming more alcohol or exercising less, although there was increased social media usage. Levels of stress in personal relationships were generally unchanged, and more than half of respondents (69.6%) reported that they had not experienced any issues in keeping their work and domestic lives separate.

Emotional well-being and self-worth

Overall, most respondents reported that homeworking was associated with positive well-being (Table 4). However, in a small number of cases the responses to questions about vigour and rest suggested that the experience of some participants could, in the long term, impact mental health (Table 4). Concerns over job security were relatively low and did not appear to be associated with reporting of poorer emotional well-being scores.

Nearly one-third (28.1%) of respondents in the first survey reported that they had experienced episodes of loneliness or isolation (Table 3). These responses were markedly higher (45.6%; $P<0.001$) in the second survey. Interestingly, this was despite there having been episodes of "lockdown release" between peaks of infection around the time of the second survey.

In the first survey, a high proportion of respondents (87.3%) considered themselves valued by their co-workers and clients and trusted by their employers.² Similarly, they felt engaged and able to contribute to team decisions (Table 3). By comparison, 16.1% reported a lack of motivation and 17.2% reported less recognition of their work. In the second survey, levels of self-value were generally similar to the first (89.8%) as were those of engagement. However, there was a markedly higher proportion of respondents feeling that their work was getting appropriate recognition ($P<0.05$).

Future working practice

Most respondents in the first survey (85.6%) felt that work practices would not return to the way they were before the pandemic. A year on, this proportion had increased (93.1%).

The second survey asked respondents to provide information on any consultation their employers had conducted with employees. Over half (59.2%) had been asked for their opinion on future working arrangements. A smaller pro-

Table 4. Responses to questions on emotional well-being

		All of the time	Most of the time	Half the time	Some of the time	Never
Enjoyment Q19/35	2020	30.9%	43.5%	9.8%	14.5%	1.3%
	2021	26.0%	50.5%	11.5%	11.3%	0.7%
General anxiety Q21/38	2020	37.2%	42.4%	9.3%	10.2%	0.9%
	2021	44.2%	42.3%	8.1%	4.7%	0.8%
Vigour Q22/39*	2020	11.4%	43.2%	19.1%	19.6%	6.3%
	2021	10.8%	36.0%	16.7%	30.5%	6.0%
Job security Q25/20*	2020	39.1%	37.4%	9.8%	8.2%	4.2%
	2021	48.6%	38.6%	5.0%	4.7%	3.1
Rest Q23/40*	2020	13.7%	42.3%	18.2%	19.4%	6.5%
	2021	8.4%	39.1%	16.0%	27.3%	9.2%
Training/growth Q36/43*	2020	17.0%	50.7%	22.3%	7.8%	2.3%
	2021	41.7%	35.2%	9.8%	9.7%	3.5%

Dark blue shaded cells = mode* $P < 0.05$

Q19/35: I enjoy working from home.

Q21/38: I have felt nervous, anxious and/or on edge since working from home.

Q22/39: I have felt active and vigorous while working from home.

Q25/20: I have been worried about job security since the COVID situation.

Q23/40: I currently wake in the morning feeling refreshed and rested.

Q36/43: I feel that there are fewer opportunities for me to learn and grow my skills at home.

portion had been involved in initiatives seeking to develop hybrid guidelines or working-from-home charters (36%). Only a handful had been involved in discussions on modifications to employment contracts to reflect changes in their working situation (13%).

Free-text statements

In the first survey the four free-text entries generated over 41,000 words of insight on what respondents found either difficult or rewarding during lockdown. Comments included recommendations on how to optimise homeworking and words of advice to employers.

Not surprisingly, isolation from colleagues was the most frequently mentioned issue. Some negative responses described feelings of paranoia, withdrawal, and loneliness.² Childcare, home-schooling, and distractions at home were also major concerns. The challenge of balancing these issues with a busy work commitment was mentioned by more than a quarter of those living with families. In apparent contradiction to their response to questioning (Q50), many clearly found it difficult to establish a satisfactory work-life balance. The importance of maintaining lines of communication was often raised (e.g.,

scheduling employer/manager catch-up calls and morning briefings). Little things mattered, such as acknowledging that a message had been received and would be addressed. Although slow responses fostered a lack of trust, instant-messaging applications were noted to be both an irritation and a lifesaver.

Eighty respondents mentioned that there was no natural end to their day. Typically, they found themselves working longer hours, which stretched into the evening. Activities included replying to emails and performing administrative tasks. They were not able to “switch off”.

Practical advice included not working at the dining table and attempting to recreate the office set-up away from family areas. Several took the concept of adopting a formal working environment further by recommending that people should dress for work. Many liked having a (metaphorical) door that could be closed when working, which is then “shut” at the end of the day, at which point they could “walk

away”.² Respondents highlighted the importance of taking regular breaks and planning their day. Many thought that taking a proper lunch break and not eating at their desk was important.

One clearly welcomed benefit of lockdown was the absence of the daily commute. A quarter of respondents noted that the time gained allowed them to be more productive, save money, and feel energised. Freedom and flexibility were also frequently mentioned.

In the second survey, the three free-text entries generated over 40,900 words of insight. For the question, “Which three aspects of working from home do you find most difficult?” 818 respondents provided answers. Interestingly, a small number reported no difficulties (n=38; 4.6%). By comparison, over a third (36.1%) reported feeling isolated and

missing contact with colleagues, closely followed by issues relating to work-life boundaries, long hours, and not being able to “switch off” (29.8%).

Other concerns were related to distractions

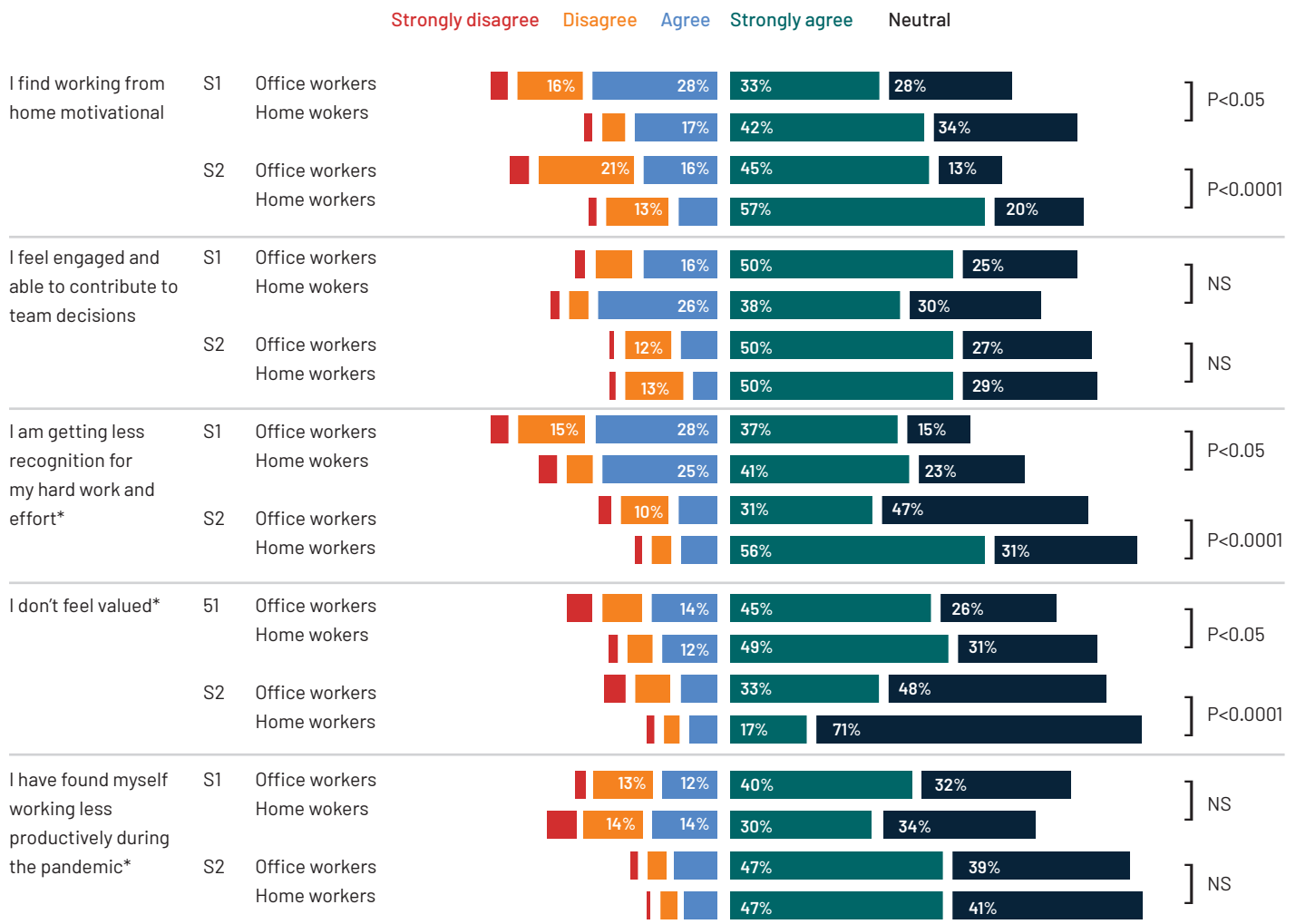


Figure 1. Comparison of work profile in office versus home workers prior to lockdown

*Represents data for negatively posed questions where data demonstrated were reversed for better interpretability.

Abbreviations: NS, not significant; S1, survey 1; S2, survey 2.

(16.0%; though only 3% specified children/childcare issues), “sameness” of the daily routine/reduced creativity/lack of motivation (11.9%), and suboptimal team/management communications (10.6%). The remaining frustrations included IT (6.9%), home office limitations (5.7%), and lack of visibility (3.1%). Interestingly, 14 people (1.7%) said they missed the daily commute, 6.1% reported that working under lockdown had reduced their physical activity (the daily commute), and 1.5% felt that working from home was not as fun as being in the office.

Eight hundred and nineteen respondents provided an answer to the question, “Which three aspects of working from home do you find

most rewarding?” A small proportion (1.0%) provided the response “None”. The most frequently expressed benefits were “no commute” (43.9%) and “time saved due to not having to commute” (38.2%). Another popular response was the benefits of flexibility (43.2%) enabling more convenient working, multi-tasking home chores, and juggling workflows. A fifth of respondents (21.1%) reported fewer distractions and being able to concentrate better. Other perceived benefits were the absence of office politics, requirement to dress smartly, or need to engage in social interactions (14.0%). Some liked the comfort of being in their own “work space” (11.1%), not having to get up early or leave the office late (10.7%), convenience of working near

home (8.0%), and saving money on things such as travel and childcare (8.1%). Overall, 7.5% reported that they were more productive. Only 1.3% reported that they had reduced their environmental footprint, mostly by not commuting; this was similar in size to the proportion who saw a benefit in no longer having to book meeting rooms for client calls (1.9%).

Eight hundred and twelve respondents expressed a view on “hybrid” working models. Two thirds (66.5%) were positive about homeworking and considered that a hybrid approach was the way forward. What this should mean in practice was less clear. Among the 75 people who offered a personal preference, 35% felt that going to the office 1 or 2 days a week

would be ideal whereas 42% suggested that once or twice a month was appropriate. A small proportion ($n = 56$; 6.9%) stated that they never wanted to return to the office, whereas 28 (3.4%) people said that they wanted to return full time.

It was agreed that hybrid working would not be good for everyone, most notably, younger team members. Here, 5.5% of respondents felt that those with less experience would benefit particularly from time in the office, enabling appropriate training and greater visibility. Whether a good idea or not, a small proportion (9.8%) recognised that the future adoption of hybrid working models could be challenging and would require careful consideration and implementation. Again, concerns about lack of social interaction and isolation were expressed along with the complexity of how defining specific “office days” might be managed (9.2%). Whether productivity would be affected was unclear, with some (1.3%) respondents expressing a view as to the greater benefits to be had from homeworking.

There was clearly confusion among some respondents (16.6%) regarding the difference between “remote” and “flexible” – that is working at a time of the employee’s choosing rather than employer-set office hours. Some felt that the onus should be on employers to be flexible in terms of when people choose to work and to address any managerial and/or legal challenges that arise with “out of hours” working. Finance was another issue, with some recommending that any (perceived) employer savings in terms of reduced office costs should be passed on to their employees.

Comparison with established home workers

In the first survey, 207 (27.3%) respondents identified themselves as pre-existing home workers, and of them, 69.6% (144 of 207) identified themselves as freelancers/consultants. In the second survey, 182 (19.7%) respondents said they were home workers before lockdown. Home workers were generally >40 years of age (82% vs. 51% of office workers) and more likely to be living with children (47% vs. 35%). Nearly

twice as many established home workers responding to the second survey felt they were worse off financially since the start of the pandemic (27% vs. 14%, respectively).

There were many similarities between the responses provided by office workers and those who worked at home before lockdown. In particular, the cohorts were similar at both time points in terms of their opinions on ability to engage with their team (Figure 1), rest (Figure 2), and establishing a daily routine and general health concerns (Figure 3; NS in all cases). Although most respondents enjoyed working from home, there was a statistically significant difference between the groups in both surveys. More home workers stated that they enjoyed working from home than office workers in the first survey² and in the second survey ($P < 0.0001$; Figure 2). The

same was seen in terms of feelings of vigour ($P < 0.005$; Figure 2) and motivation ($P < 0.05$; Figure 1). In the first study, home workers felt less valued than office workers ($P < 0.05$; Figure 1) and home workers felt they were not getting recognition from their employers ($P < 0.05$; Figure 1). This difference in recognition appeared to have increased further by the second study ($P < 0.0001$; Figure 1).

Significantly more office workers in the first survey reported being busier than before the pandemic than home workers ($P < 0.0001$; Figure 3), but there was no difference between the groups by the time of the second survey. Office workers were also eating at their desks more frequently; however, they also reported taking more time for lunch (Table 3). In the first survey, home workers were clearly finding it easier to concentrate ($P < 0.05$; Figure 3), but there was no discernible difference between the groups by the second survey.

The increase between our two surveys in feelings of loneliness and isolation from 28.1% to 45.6% is of concern. This occurred despite the time between the surveys spanning a period in the UK when lockdown was lifted and life appeared to return to some normality.

More office workers than home workers in the first survey felt that they were missing opportunities for growth ($P < 0.05$), but there was no difference between the two groups by the time of the second survey (Figure 2). A slightly greater proportion of office workers (28.1%) in the first survey felt lonely and isolated, but almost a quarter of home workers (23.5%) reported similar feelings ($P < 0.05$). Markedly more office workers reported loneliness and isolation than home workers by the time of the second survey ($P < 0.001$; Figure 3).

Although significantly more office workers were concerned about job security in both surveys ($P < 0.05$; Figure 2), general reporting of anxiety was higher in the home workers ($P < 0.0001$ both surveys; Figure 2). Both groups were similar in terms of alcohol intake, social media use, and relationship strain in the first survey (Table 3). Although alcohol consumption in the groups remained similar in the second survey, office workers reported strain on their relationships more frequently and spending more time on social media. Home workers took less exercise in both surveys (Table 3, $P < 0.05$).

Discussion

The context of lockdowns

The first “lockdown” in the UK was announced on March 23, 2020. Our first survey opened on May 28 and closed on June 11, 2020, meaning survey participants of this survey had experienced homeworking for 10–12 weeks. Around this period, lockdowns were being enforced by most governments across the world as a primary measure to reduce the spread of COVID-19.

At the time of the second survey (July 24 to August 16, 2021), the UK government was implementing stepwise measures to ease COVID-related restrictions and encourage a general return to offices. This occurred in parallel with a programme of mass vaccination. In other countries, the situation varied depending on infection levels, hospital capacity, and speed of vaccine roll-out.

These surveys detail the experiences, opinions, and insights

However, employers did score some successes. Not only had respondents remained equally motivated and engaged between the two surveys (despite the ongoing pandemic), but there was also a significant perceived improvement in opportunities for growth.

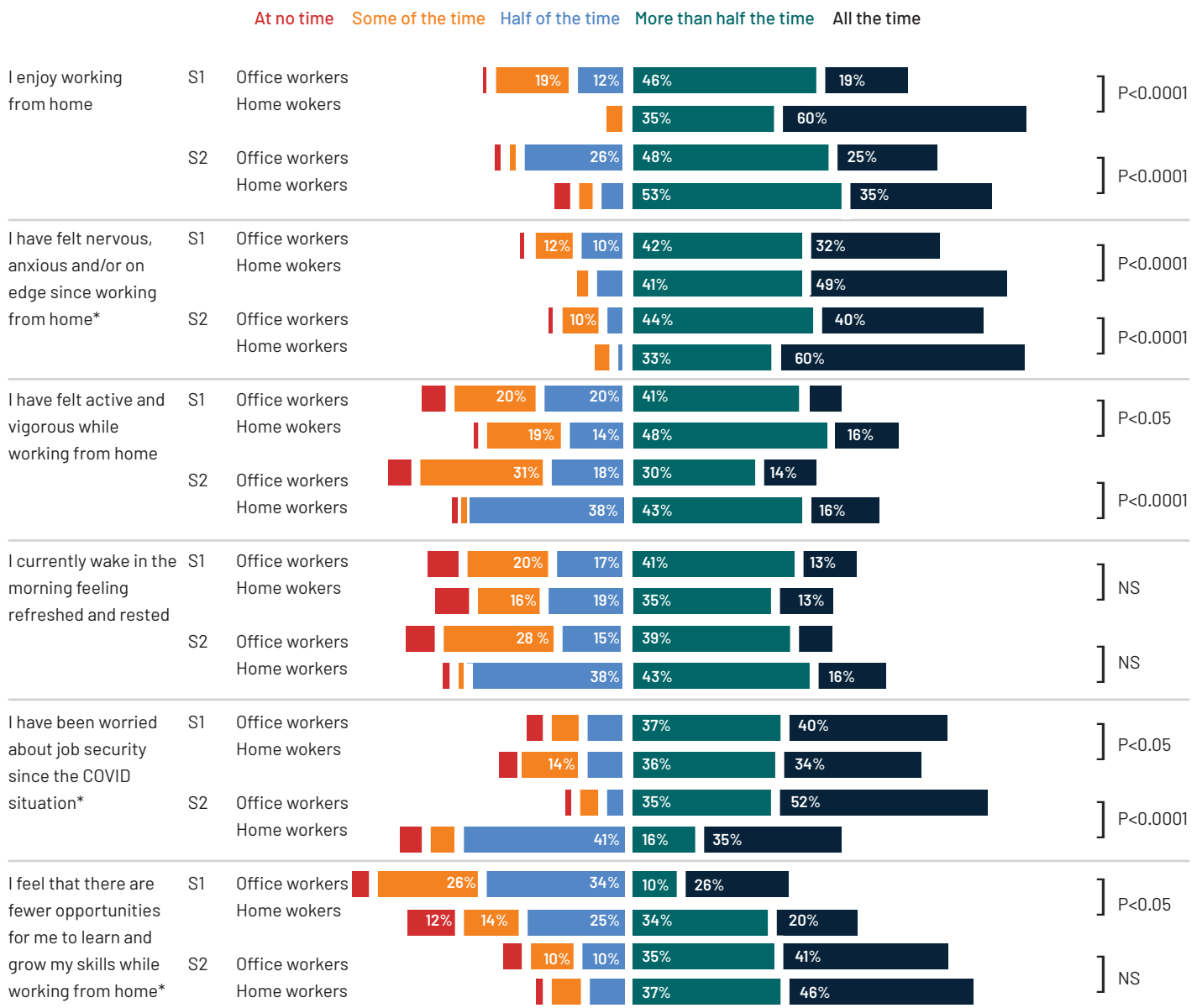


Figure 2. Comparison of emotional well-being responses in office versus home workers prior to lockdown

*Represents data for negatively posed questions where data demonstrated were reversed for better interpretability.

Abbreviations: COVID, coronavirus disease; NS, not significant; S1, survey 1; S2, survey 2.

into working practices of full-time, part-time, and freelance workers during the time of COVID-19-related lockdowns and other restrictions.

Changing working patterns

An underlying theme in both surveys was that office workers generally welcomed home-working, appreciating the lack of commute and the time saved. This observation reflects the findings of similar surveys.^{8,9} Perhaps the most

striking observations were around patterns of working. Many respondents in the first survey observed that they were busier than before the pandemic and finding it difficult to “switch off”. The data suggest that respondents were busier still by the time of the second survey – with the number of those working over 40 hours a week increasing markedly. It is reasonable to assume that this affected efforts to establish daily routines and a reasonable work-life balance as well as

affecting behaviours such as working out of standard hours, taking less exercise, and eating at your desk. Employers may have become more demanding during the intervening period, but many respondents commented on how they found it difficult to walk away from their computers. It could be that, as Parkinson’s law states, “activity expands to fill the available time”, and respondents filled time at their desks that would otherwise have been spent commuting.

Win-win for employer and employee?

The increase in working hours not only coincided with a boost in reported productivity, but also with a high proportion (43.2%) of respondents remarking having the freedom to complete home chores during their working day – perhaps contributing to their levels of satisfaction. In an experiment undertaken with call-centre workers in 2015, the Ctrip study, sales staff were randomly assigned to either home- or office-working for 9 months.¹⁰ The study found that performance increased in the home-working group (13%). Reasons for the increased productivity included working longer hours, taking fewer breaks, and having fewer distractions. Home workers also reported improved work satisfaction. However, promotion rates conditional on performance fell.

At the end of the Ctrip study, employees were given the option to continue working from home and about half decided to return, citing isolation and loneliness as their reason.¹⁰ Interestingly, the data we collected appears to indicate that people are missing the office. The increase between our two surveys in feelings of loneliness and isolation from 28.1% to 45.6% is of concern. This occurred despite the time between the surveys spanning a period in the UK when lockdown was lifted and life appeared to return to some normality. It is difficult to determine whether these feelings were a consequence of COVID-related restrictions or brought on by working in seclusion for long hours.

A legal framework needed

One of the other concerns to emerge from the present work was the legal employment framework. It is of particular concern that people were working more hours than those dictated under formal/legal working time directives.¹¹ This puts employers at risk, even when the work is performed voluntarily/informally. It also threatens the health and well-being of employees.

a company could make modest savings assuming it was possible to exit leasing contracts, take on smaller premises, and manage additional hardware requirements in moving to homeworking. In contrast, each employee had the potential to make savings approximately double those available to a single employer.

The attraction of flexibility

Another issue was the variable interpretation of remote and flexible working. Many respondents simply assumed that working from home meant working flexibly, whereby they could fit work commitments around housework and childcare, catching up with emails, and “finishing-off” work late into the night. When implementing necessary changes during the first lockdown, the onus was for employers to be fully flexible as to when people chose to work, addressing any managerial challenges of out-of-hours working without regard to the interests of the business. Although flexibility is clearly attractive, it adds challenges and should not be considered the same as general homeworking. The desire for employers to be “flexible” was a key demand made by many respondents in both surveys, a desire that mirrors the findings of a survey by the consulting firm Insigniam conducted in early 2021.⁹ The company sought the views of 1,110 people working for worldwide companies and found that people wanted more flexible work arrangements. This will need to be given appropriate consideration by both employers and employees when defining future working agreements.

A learning curve for employers

In addition to possible “overworking”, it was particularly disappointing to note that over half of employers had still not performed appropriate health and safety checks of the informal workspaces. Many employers had not provided specific safety information or instructions on working from home, including employees’ responsibility to report their status to insurance companies, landlords, and mortgage holders. However, employers did score some successes. Not only had respondents remained equally motivated and engaged between the two surveys (despite the ongoing pandemic), there was also a significant

perceived improvement in opportunities for growth. In addition, significantly higher levels were reported of respondents feeling valued and getting appropriate recognition from employers for their contributions. This coincided with fewer concerns being expressed in the second survey over poor communication at a company level.

In summarising the key learnings (for employers) given by respondents to the first survey we identified six key points.² These included: flexibility (on the part of employers), trust, optimisation of communication, ensuring that work activities (meetings and instant messaging) were not intrusive, adopting health and safety policies that are optimised for the homeworking environment, and offering the necessary tools/ equipment to do their jobs. In reviewing feedback from the second survey, it seems that these issues were no longer as relevant after 12+ months of working from home. Only a few comments were aimed at employers not trusting employees, IT issues, or poor communication, while dissatisfaction with video meetings was rarely mentioned. It seems that we have adjusted to the new working environment and many of the immediate concerns were simply a response to change and teething problems that have been reported previously.¹²

Making successful change permanent

Reflecting on the way ahead, a recent BBC article made the point that the transition to the more permanent adoption of hybrid or homeworking will take time and needs to be completed with sensitivity if resentment is to be avoided.¹³ Although progress has been made in supporting those employees who remain working, at least in part, from home, what is clear from all surveys is that employers’ dialogue with their employees must be open and continuous and that formal home/hybrid working practices need to be established. The office is undoubtedly a positive environment for many workers, but there will be situations where being in the office full time will be impractical or undesirable. The potential environmental benefits of reduced commuting have yet to be calculated. Nevertheless, the COVID-19 lockdowns have demonstrated that there is a feasible alternative.

Most respondents had a positive early lockdown experience: they enjoyed time at home, liked the freedom, felt secure in their posts, and were cheerful. Most established a daily routine, coped with an increased workload, and felt valued.

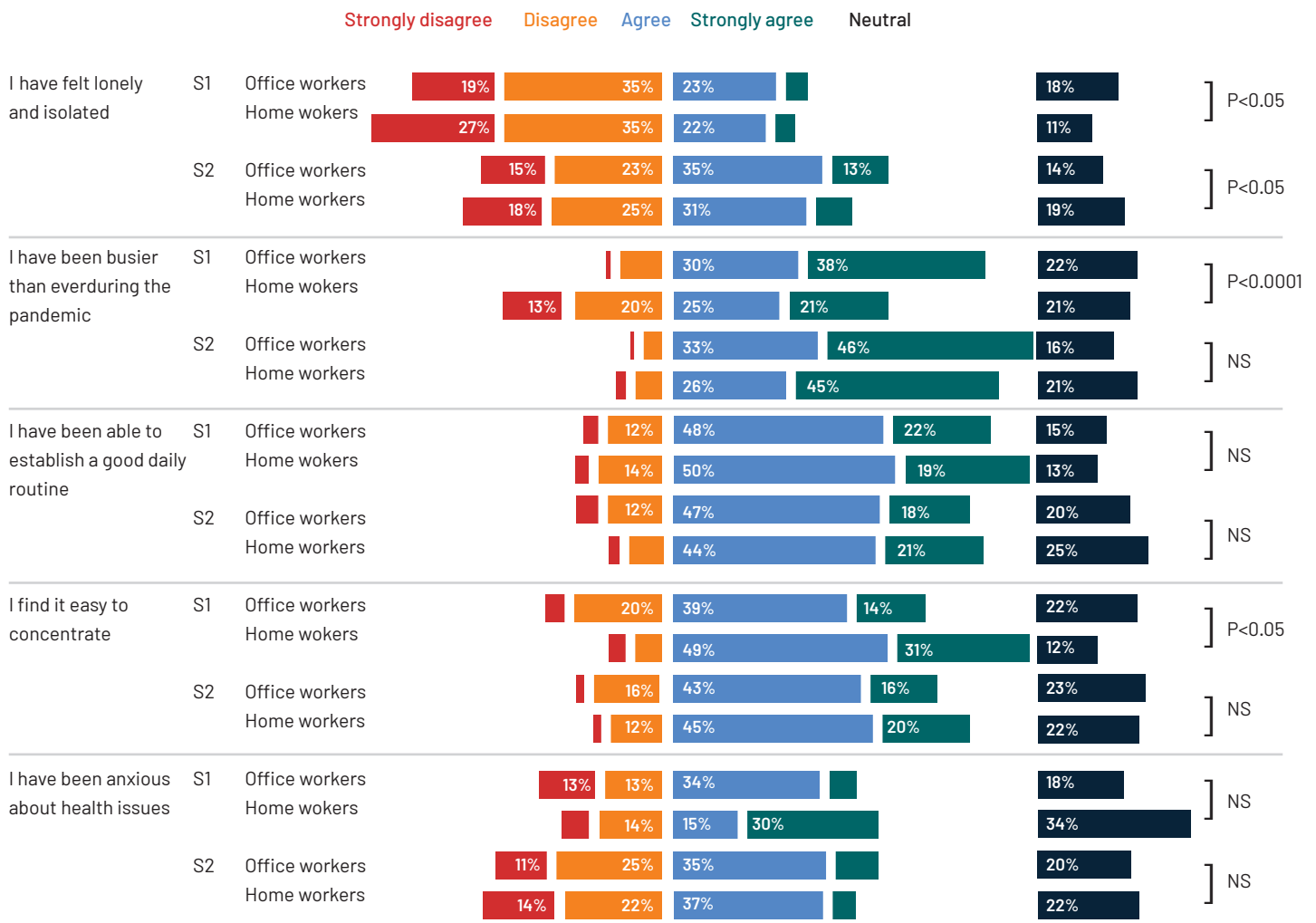


Figure 3. Comparison of factors of concern in office versus home workers prior to lockdown

Diverging Likert data plot with neutral responses (black data bars) off-set.

*Represents data for negatively posed questions where data demonstrated were reversed for better interpretability.

Abbreviations: NS, not significant; S1, survey 1; S2, survey 2

Sharing the benefits of homeworking

On a related point, it was frequently raised in the comments how employers should share the benefits of reduced office costs with their employees. Interestingly, the authors have previously modelled just such a cost-saving scenario.¹⁴ The analysis showed that a company could make modest savings assuming it was possible to exit leasing contracts, take on smaller premises, and manage additional hardware requirements in moving to homeworking. In contrast, each employee had the potential to make savings approximately double those available to a single employer. The analysis was performed before the

recent changes in fuel and energy costs and did not consider any increase in insurance premiums that may occur with a change to working from home.

Limitations

As with any survey, our work has limitations. Although surveys are a valuable research tool, they benefit from a protracted evaluation and refinement process to provide robust data.¹⁵ By necessity, the first survey was developed quickly. Though it was based on a recognised template, it has not been validated. The second survey was created to relate directly to the first.

Recruitment of responders for both surveys was via dissemination through the authors' networks, meaning that the study population was open to selection bias and although they recruited from a similar pool of potential responders, it cannot confirm the proportion of responders that took part in both surveys. There was no baseline measurement to compare our data against – these responses may be nothing more than what we would have seen if the survey had been conducted before the pandemic. The survey populations are UK-centric and location may have affected the overall findings. A recent BBC article highlighted possible cultural issues regard-



ing homeworking patterns across Europe.¹⁶ For example, the French and Japanese appear to be reluctant to work remotely, their workplaces being inextricably linked to their identity and an organisational sense of belonging. Among the study's strengths are the sample size and the coherence of the two study cohorts, allowing us to compare opinions from two key times during the pandemic.

Conclusion

An article published in *The Spectator* magazine early in 2020 posed the question, "Will Covid kill off the office?"¹ Our survey highlighted how lockdown has changed working practices and it seems unlikely that the industry as a whole will return to a pre-pandemic work model. Most respondents had a positive early lockdown experience: they enjoyed time at home, liked the freedom, felt secure in their posts, and were cheerful. Most established a daily routine, coped with an increased workload, and felt valued. However, all was not well for some, with many reporting loneliness or isolation.

The present study showed that it is not only those who have remote working sprung on them that suffer from loneliness and isolation – it also occurs in established home workers. For some,

this experience may have been a consequence of the wider societal lockdown. Our data appear to confirm the findings of other research that continuous homeworking can be detrimental to good mental health.^{17,18} We saw that it is associated with overworking that may have long-term health consequences.

Discarding the office altogether may affect personal development as the surveys indicate that home workers struggle for recognition of their work and possible advancement. This is of particular concern for the development of younger employees, who, when working at home, may miss out on serendipitous and anecdotal learning. Social interaction and building company culture are also important. We must conclude therefore that an office-homeworking hybrid will be a likely path for many. However, to be successful it will be necessary for employees and employers to negotiate optimal working patterns that are beneficial for all parties. Such arrangements need to be formalised and recognise issues such as shared responsibility for employee safety. Although the office has been identified as part of the problem, it is clear that it will also need to be part of the solution.

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Disclosures and conflicts of interest

The authors receive no compensation for writing this article and declare no conflicts of interest.

Data availability statement

The original data are available to all for purposes of further research, upon reasonable request to the lead author.

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