

Home and away

Differences in time use between teleworkers and commuters

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Introduction

- ▶ teleworking boomed during the pandemic in the UK and elsewhere; within a year, almost half of the employees in the EU was working at least occasionally from home (before then they represented just 11%)
- ▶ in March 2023 more than 30% of workers define themselves as mostly teleworking in the UK
- ▶ Teleworking is likely to become a permanent feature of the employment landscape, changes in behaviour associated with it are a matter of substantial policy interest.
- ▶ this paper will explore the 'effects' of telework taking advantage of the almost natural experiment produced by the pandemic that forced almost half of the British workforce to telework from one day to the next

The research questions

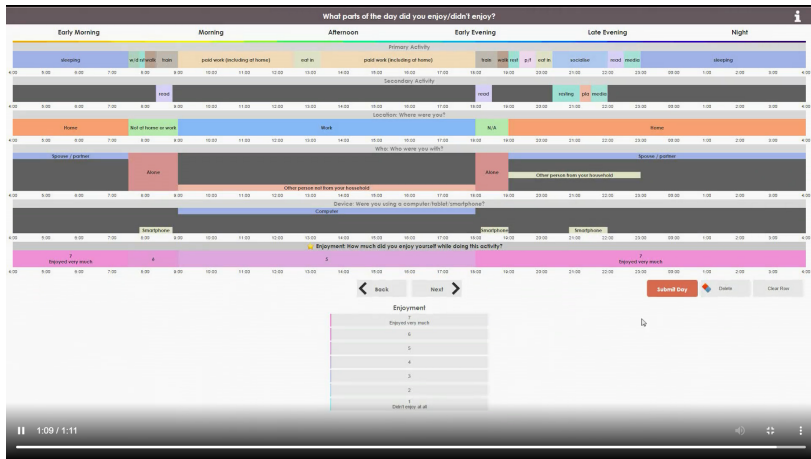
- ▶ the literature about telework before the pandemic finds that working from home (WFH) is associated with significantly less paid work time, more work being done during non-regular hours, and more fragmentation of work periods
- ▶ not great things but clearly it is hard to extrapolate to the general population because teleworkers were a highly self-selected group before the pandemic.
- ▶ we explored the 'consequences' of telework on many activities but today we focus on
- ▶ paid work - are teleworkers working less, at more irregular hours?
- ▶ sleep - sleep deprivation impacts our health
- ▶ well being - how do we feel about teleworking?

- ▶ We analyse 6 waves of a UK representative online time-use diary survey
 - ▶ wave 1 – the prepandemic wave, collected throughout 2016
 - ▶ waves 2, 4 and 5 – the three national lockdowns in: May-June 2020, November 2020; and January 2021
 - ▶ wave 3 – August 2020, between 1st and 2nd lockdowns
 - ▶ wave 6 – August 2021, 6 months after most of the restrictions had already been lifted
 - ▶ wave 7 – March 2023
- ▶ between 1 and 3 days per respondent
- ▶ approx. 7000 diary days in total.
- ▶ no doubt there is seasonality in the data
- ▶ sample size is limited and is a bit problematic
- ▶ the data are available from the core collection of the UK Data Archive (study number 8741).

Empirical strategy

- ▶ All workers can be grouped into the following:
 1. those still going regularly to a workplace ('continuing commuters' or CC)
 2. those started teleworking during the pandemic ('new teleworkers' or NT)
 3. others ...
- ▶ we will compare the time use of the 'continuing commuters' (CC) and the 'new teleworkers' (NT)
- ▶ before the pandemic, both (1) and (2) were going to the office and with the pandemic approximately half of them started teleworking
- ▶ teleworking wasn't randomly assigned in the population, mainly because not all occupations or tasks were equally able to be done from home – but still...
- ▶ teleworking affected a very large part of the workforce and we can control for some of the factors that may have influenced the likelihood of teleworking
- ▶ controls: gender, age-group, parental status, lockdown dummy, day type and occupation.

The instrument



Comparing the demographics of NT and CC

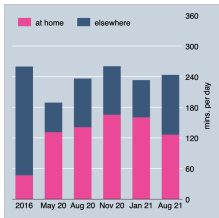
	Still workplace		New teleworkers	
	No.	(%)	No.	(%)
Sex				
Male	809	52.8	634	51.1
Female	723	47.2	606	48.9
Age				
18-29	284	18.5	263	21.2
30-44	515	33.6	422	34.0
45-59	533	34.8	354	28.5
60+	200	13.1	201	16.2
Marital status				
Single	383	25.1	347	28.0
Married/living with partner	1057	69.1	819	66.0
Divorced/widowed	88	5.8	74	6.0
N. children in HH				
None	876	57.1	856	69.0
1	369	24.1	168	13.5
2	224	14.6	180	14.5
3+	64	4.2	36	2.9
Occupational group				
Semi or unskilled manual work	250	16.3	15	1.2
Skilled manual worker	283	18.4	64	5.2
Clerical/administrative	234	15.2	265	21.6
Supervisory/junior managerial	275	17.9	281	22.9
Intermediate managerial/prof./admin.	364	23.7	481	39.2
Higher managerial/prof./admin.	129	8.4	121	9.9
Total	1533	100.0	1240	100.0

The scale of the 'experiment':

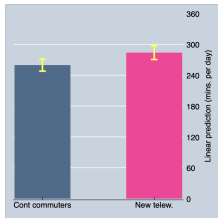
Figure: Prevalence of teleworking throughout the pandemic

	2016	May 20	Aug 20	Nov 20	Jan 21	Aug 21	March 23
Continuing Comm.	100	45.8	53.0	54.5	49.7	69.1	-
New Teleworkers	0.0	54.2	47.0	45.5	50.3	30.9	-
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

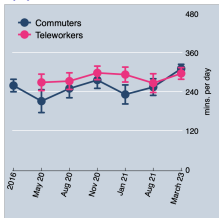
Are we working less? Are the NT working less than the CC?



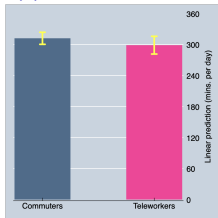
(a) Mins of work by location



(b) Pred. values work time



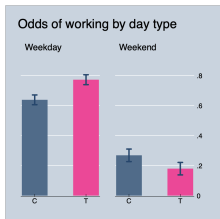
(c) Work time for C and T



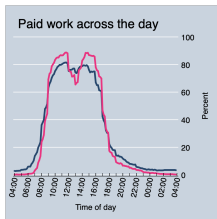
(d) Telew. vs commuters

- ▶ big change in the location of work but not in the amount
- ▶ NT do not work less than CC, in fact they seem to be working a bit more (+22 mins), throughout the pandemic
- ▶ there are no statistically significant differences between T and C in 2023

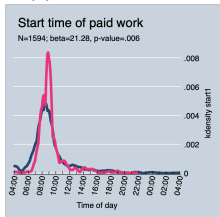
Are the NT moving work to the weekends? or evenings?



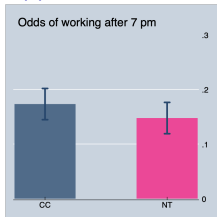
(a) March 20-March 23



(b) March 20-Summer 21



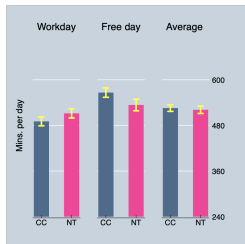
(c) March 20-Summer 21



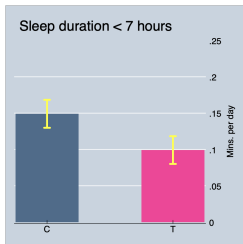
(d) March 20-March 23

- ▶ NT are less likely to work on weekends than CC
- ▶ the former remains true in March 2023
- ▶ the tempogram for NT is squeezed inside that of the commuters (and commuting is being excluded)
- ▶ there is a 20 minute difference in start time between NT and CC
- ▶ no statistically significant difference in end time
- ▶ the odds of working after 7, 8 or 9m are the same for NT and CC
- ▶ NT are more likely to have multiple work episodes (twice as likely)

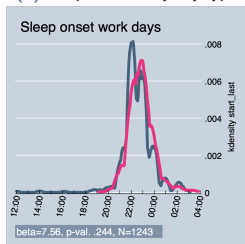
Sleep



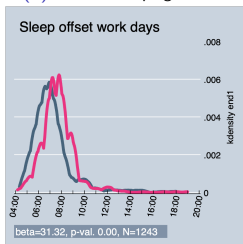
(a) Sleep duration by day type



(b) Odds of sleeping < 7 hrs



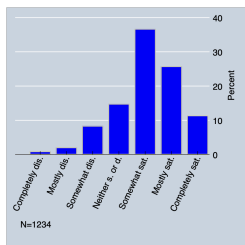
(c) bed time



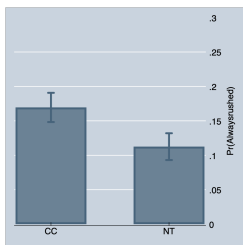
(d) wake up time

- ▶ NT and CC sleep the same on average
- ▶ but the NT experience less social jetlag and less sleep deprivation (one third lower!!)
- ▶ NT achieve this by waking up later, 20 min approx, on weekdays.
- ▶ no statistically significant differences between the two groups in bedtime

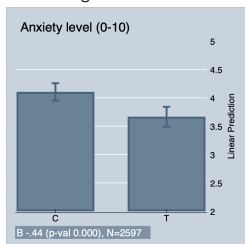
Subjective well being



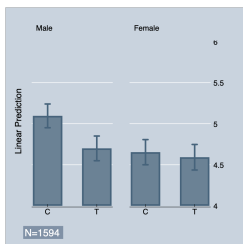
(a) Satisfaction with the 'new work arrangement'



(b) Odds of feeling Always rushed



(c) Anxiety



(d) Work enjoyment by sex

- ▶ by the summer of 2020 almost 80% of the new teleworkers were satisfied with the new work arrangement
- ▶ satisfaction with teleworking oscillated quite a bit and was lower during lockdown periods
- ▶ all the measures of negative emotions, like anxiety, time pressure or stress, are significantly lower for NT
- ▶ the downside of teleworking could be work enjoyment that, for males, is about 0.3 SD lower

Conclusions

- ▶ teleworking shows no sign of returning to pre-pandemic levels after 'freedom day',
- ▶ this may not be a bad thing since the teleworkers are not working any less nor in any less healthy way (no more evening work or working on weekends)
- ▶ this may explain why they are so satisfied and less stressed
- ▶ but going to the office seems more fun, for male teleworkers especially
- ▶ we still should explore how much of these 'effects' of teleworking remain now
- ▶ it is a pity that we have no measure of satisfaction with work-life balance because that is possibly one of the biggest benefits of teleworking for families, especially those with young children
- ▶ the benefits of telework may not just apply to teleworkers...