



What can we learn from the COVID-19 pandemic about how people experience working from home and commuting?¹

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1. Aim of research

As a result of the exceptional measures adopted by many countries to combat the COVID-19 pandemic, the movement of millions of individuals has been restricted in an unprecedented manner. All over the world, people are being encouraged or forced to work from home instead of commuting to their regular work location. This presents a unique opportunity to explore questions about the importance of mobility in people's lives, the role of face-to-face contact for work and the importance of the very idea of "going to work".

The climate crisis makes all these questions even more important: developing a more sustainable mobility system will require us to reduce transport-related carbon emissions, of which commuting constitutes a large share (Ferreira et al., 2017). Reducing mobility, however, has never been a popular idea among politicians (Nikolaeva et al., 2019): up to now, it has largely been seen as a radical proposition or even a "taboo" (Gössling & Cohen, 2014). In the spring of 2020, this "taboo" has unexpectedly been broken, enabling a broader societal and political debate on the role of mobility, and offering researchers an opportunity to study what a less mobile society might look like.

Through an online survey, our research investigated people's perceptions and experiences of working from home as an alternative to commuting. The main questions we explored are: What do people see as the main advantages and disadvantages of working from home? Do they miss the experience of commuting to work? Do they think they will likely work from home more often after the current restrictions are lifted?

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2. Data

The **online survey** was distributed through social network platforms internationally among individuals who regularly commuted to their workplace before the pandemic, but who since the pandemic (try to) work from home and therefore do not commute at all. A key feature of our data is that all respondents are *potentially able to work from home*. A data clean-up was performed to increase reliability. The results we present here are based on **1,014 responses**, collected between 31st of March and 27th of April 2020. The survey is the first of the two stages of this research: in follow-up interviews with respondents we will further explore the findings.

Table 1: Main sample characteristics (N=1,014)

Gender	Women: 51% ; Men: 46% ; Other/did not say: 3%
Age	18-34: 42% ; 35-54: 48% ; 55+ : 10%
Education	Non-university: 13% ; Undergraduates: 18% ; Master degree or higher: 70%
Previous working from home	Less often than weekly: 62% ; Weekly or more often: 38%
Most represented occupation groups	Academia/education: 17% ; Government: 17% ; IT/engineering: 16%
Most represented countries of residence	Netherlands: 48% ; France: 9% ; USA: 7% ; UK: 5% ; Germany: 5%

3. Key results

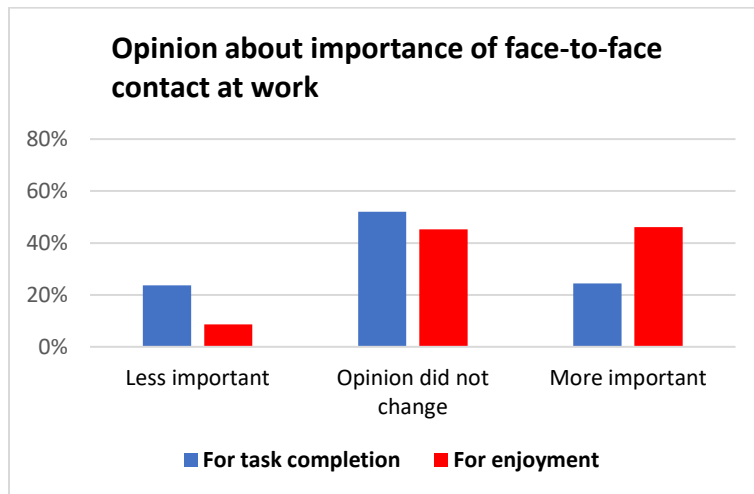
3.1. Slightly less productive and enjoying work less, but moderately positive about working from home in the future

Most respondents report lower productivity when they work from home relative to before: 56% report being less productive now, while 43% report being at least as productive as before. A slightly higher proportion of respondents (61%) also reports enjoying work less than before.

One of the challenges people face when working from home is the inability to meet face-to-face with colleagues. Our results suggest that face-to-face contact is important not only for “getting the job done”, but also for enjoying work more generally: while only 22% think face-to-face contact at work is very important for achieving their work tasks, 53% think it is very important for enjoying work. Many respondents have also adjusted their views on this issue as a result of the pandemic (Fig. 1): 46% now think that face-to-face contact is *more* important for enjoying work than they thought before (while only 9% now think that

it is *less* important). The picture is less clear when it comes to changes in the perceived importance of face-to-face contact for work tasks: 24% now think it is more important, but an equal proportion of 24% think it is less important. In spite of all this, 45% of respondents report being more positive about the potential of working from home than before, while only 14% are more negative.

Figure 1: Change in respondents' opinion about the importance *face-to-face contact at work* for task completion and enjoyment from work, relative to before COVID-19 pandemic (%)



Towards the end of the survey we gave the respondents space for additional comments or reflections. Quite a few of them commented that the best solution is actually a mix of working from home and going to work, as in these two examples:

“I hope employers will realise that it is possible to work from home and be effective. Having a nice balance between office and work from home is best. Working from home 100% has its disadvantages.”

“Working from home for 1 or 2 days per week is fine for me, this has not changed, but working from home all the time is not great.”

3.2. Previous experience with working from home influences evaluation of the current situation

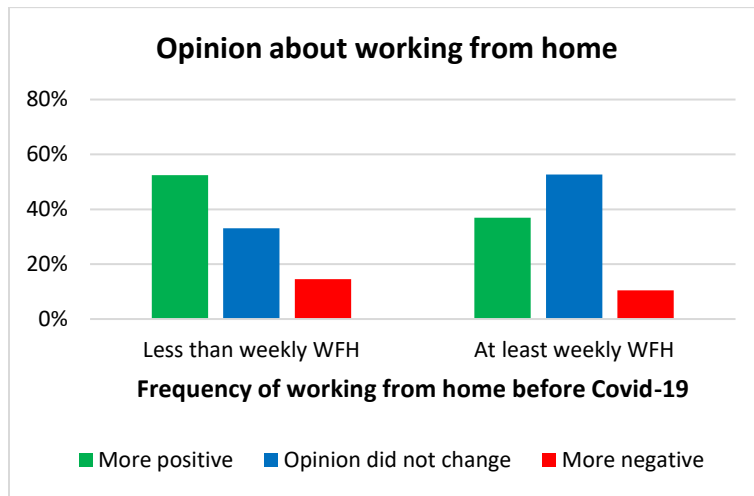
As might be expected, respondents have a variety of jobs with varying work arrangements: some have often worked at home prior to the corona crisis, while for others this is a new experience. As one respondent noted:

“I took social contact with my colleagues for granted. Now I start to appreciate it.”

In several instances, we found statistically significant differences between the responses of people who worked regularly from home (at least weekly) before the pandemic and those who did not (less than weekly). People who previously did *not* regularly work from home

have generally changed their opinion about working from home *more* than regular-home workers : 52% are now more positive and 15% more negative about working from home, compared 37% and 10% for regular home-workers (Fig. 2). Furthermore, 30% of those who did not previously regularly work from home now perceive face-to-face contact for work tasks *as less important* than before (vs. 16% for regular home-workers).

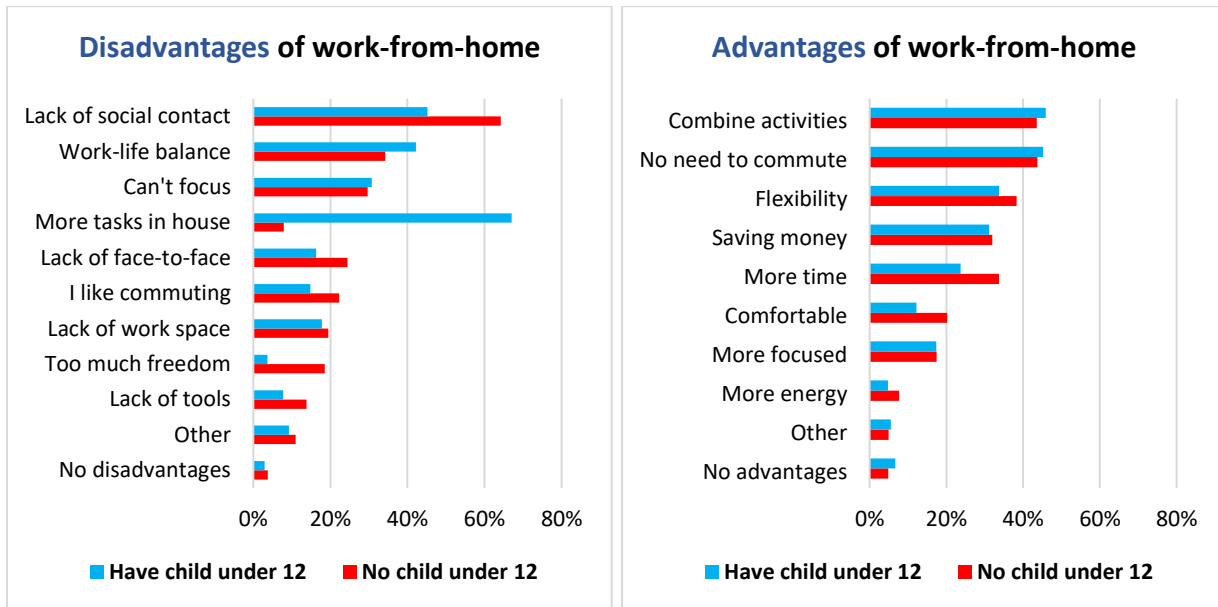
Figure 2: Change in respondents' opinion about *working from home* by frequency of working from home before the COVID-19 pandemic (%)



3.3. Many miss social contact at work, parents with young children juggle tasks

The survey revealed large variations in the perceived advantages and disadvantages of working from home during the COVID-19 pandemic (Fig. 3). For people *without* children younger than twelve, lack of social contact (64%), difficulties with work-life balance (34%) and difficulty to focus (30%) are the most important disadvantages. For respondents *with* children younger than twelve, increased household and care tasks are perceived as by far the biggest disadvantage (67%). For both groups, the biggest perceived advantages are not needing to commute (44%), the ability to combine work with other activities (45%), and increased schedule flexibility (37%). In addition, men report lack of social contact as a disadvantage of working from home slightly more often than women (men: 63% vs women: 56%), and slightly more often report having more time than women (men: 35% vs women: 27%).

Figure 3: Perceived advantages and disadvantages of working from home (%)



It should be noted that these results need to be interpreted in the light of exceptional circumstances related to the COVID-19 pandemic, in which the closure of schools and day-care facilities has likely had a significant impact on people with children’s experiences with working from home. As reflected by the following two respondents:

“Working while also having to school children at home is a complete different experience from working at home without children present.”

“Working from home can be great; working from home combined with childcare/home-schooling is not sustainable.”

3.4. Commuting is not “dead time”, but most car commuters don’t miss commuting

In transport planning, travel time to work is traditionally considered as a waste that should be minimized: fast and efficient transport remains the ultimate goal of planners. While innovations like the hyperloop and driverless vehicles promise ever-increasing frictionless travel, more and more academic research has challenged this perspective and highlighted the intrinsic value of mobility (Milakis et al. 2015; Mokhtarian and Salomon, 2001; te Brömmelstroet et al., 2017). Our survey provides further confirmation of the intrinsic value of mobility: 69% of respondents stated they miss at least some aspects of commuting. The main aspects missed by respondents include the activity of commuting itself (53%), the ability to spend some time alone (25%), and feeling independent (24%).

However, the answers vary significantly by commute mode and duration (Fig. 4). Car commuters miss commuting the least: 55% of this group do not miss it at all. Commuters by (e-)bicycle are the group who miss commuting the most, with 91% missing at least some aspects of commuting. As might be expected, the feeling of missing commuting also decreases with increasing commute duration (Fig. 5).

Figure 4: The perceived feeling of missing commuting while working from home by *mode of commute* (%)

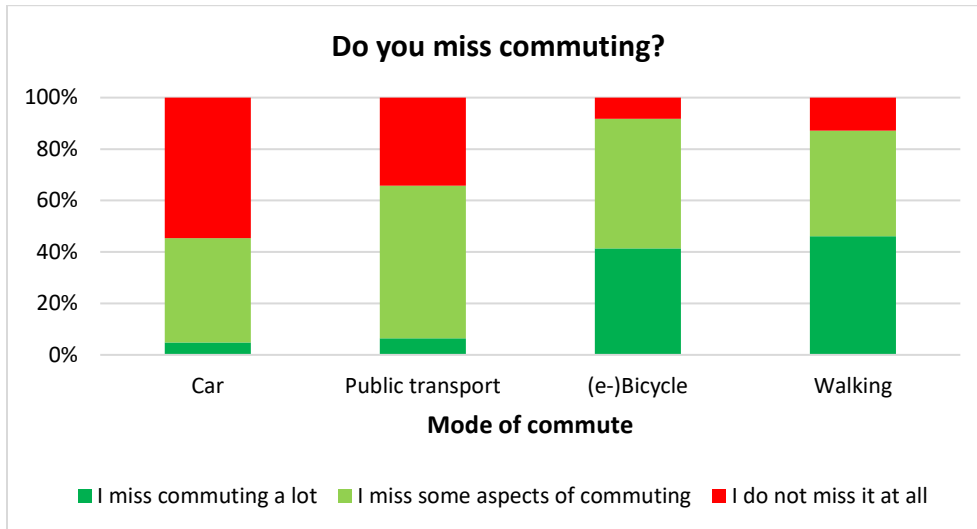
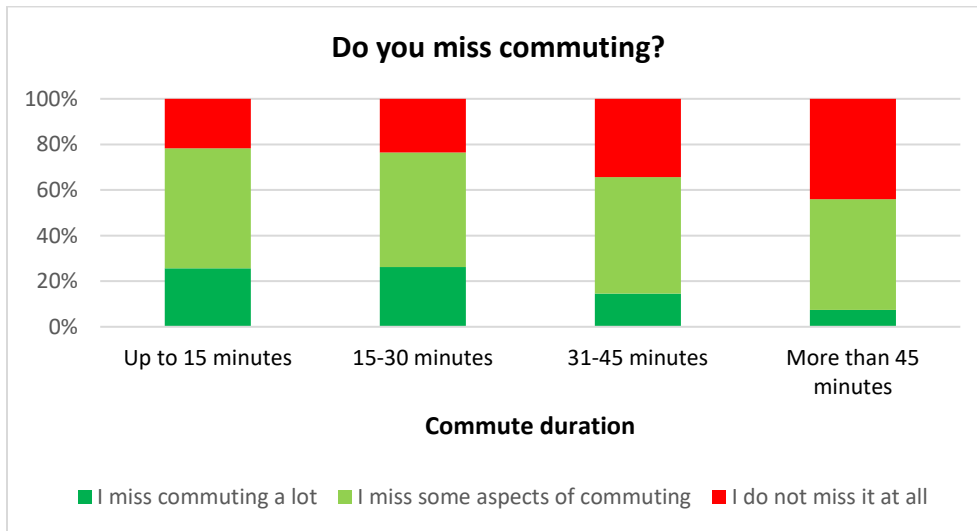
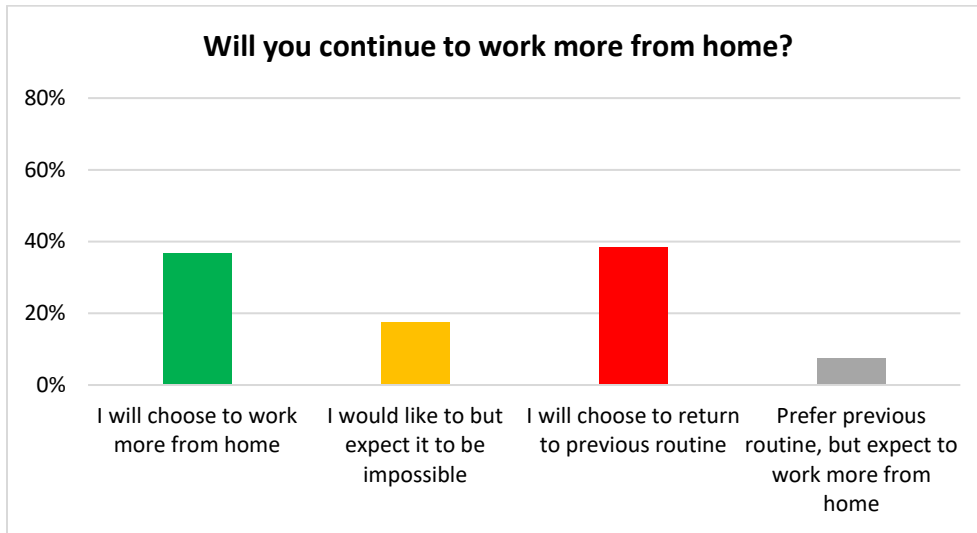


Figure 5: The perceived feeling of missing commuting while working from home by *commute duration* (%)



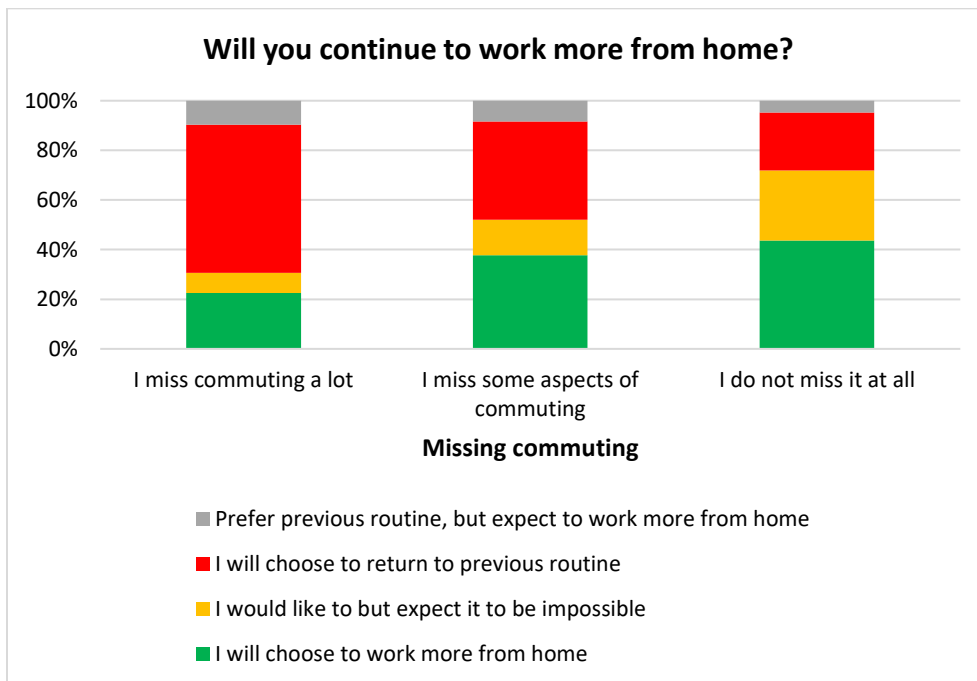
Our analysis suggests that after restrictions are lifted, a majority plan to go back to their previous routines, but part of this majority is a large group that ideally would like to shift to more working from home (Fig. 6): 38% will choose to go back to their previous routine (in red), while 18% would like to work more from home but *do not expect this to be possible* (in orange). 37% of our respondents will choose to work more from home (in green).

Figure 6: The perceived *likelihood of working more from home* after restrictions are lifted (%)



The connection between work and commuting is evident in the relationship between missing commuting and the intention to work from home in the future (Fig. 7). Among those who do not miss the commute at all, 72% express desire to work more from home in the future. Among those who miss commuting a lot, 69% would like to go back to their previous work routine.

Figure 7: The perceived *likelihood of working more from home* after restrictions are lifted by the perceived feeling of missing commuting (%)



4. Conclusion and next steps

Our analysis reveals some of the complex interactions between the domains of work, home and commuting. Understanding these interrelationships can contribute to planning a transition to low carbon mobility that mobilises a broader societal consensus on the benefits and drawbacks of reduced mobility.

Although many people welcome the possibility of working more from home, our survey shows that commuting also has an intrinsic value. Inevitably, people have conflicting wishes that need to be balanced: they want to save time and be able to work more flexibly, but they also desire face-to-face contact, being outdoors and spending (some) time alone. However, most people do not miss long commutes, particularly if travelling by car. Overall, our results suggest that the most socially desirable way of balancing these competing inclinations/wishes might be a system which *enables* more commuting by cycling and walking, together with increased *opportunities* to work from home (if desired and possible).

Admittedly, there are many nuances to add to this general picture: differences between occupations, autonomy of workers and the need for face-to-face contact at work should be further explored at a later stage, since they clearly influence possible transitions to low carbon mobility. After conducting this exploratory survey, over the next months we plan to dig deeper into the issues addressed in the survey through interviews.

Finally, it should be noted that the context of this research is highly unusual, and many of our respondents are facing tremendous challenges related to worrying about their own health and the health of their loved ones, job security and income. In addition to working from home, most of our respondents are experiencing varying degrees of social distancing and/or isolation which may have impacted their perception of working from home; this was evident in the written additional reflections of some respondents. Therefore, our results should be understood as the beginning of a conversation about the organization of work and of commuting, rather than as a firm conclusion.

References:

- Ferreira, A., Bertolini, L., & Næss, P. (2017). Immutability as resilience? A key consideration for transport policy and research. *Applied Mobilities*, 2(1), 16-31.
- Gössling, S., & Cohen, S. (2014). Why sustainable transport policies will fail: EU climate policy in the light of transport taboos. *Journal of Transport Geography*, 39, 197-207.
- Milakis, D., R. Cervero, B. van Wee, & K. Maat. (2015). Do people consider an acceptable travel time? Evidence from Berkeley, CA. *Journal of Transport Geography* 44, 76–86.
- Mokhtarian, P.L., & I. Salomon. (2001). How derived is the demand for travel? Some conceptual and measurement considerations. *Transportation Research Part A: Policy and Practice* 35(8), 695–719.
- Nikolaeva, A., Adey, P., Cresswell, T., Lee, J. Y., Nóvoa, A., & Temenos, C. (2019). Commoning mobility: Towards a new politics of mobility transitions. *Transactions of the Institute of British Geographers*, 44(2), 346-360.

te Brömmelstroet, M. C. G., Nikolaeva, A., Chan, C., Glaser, M. A., & Nicolaisen, M. (2017).
Traveling together alone and alone together: Mobility and potential exposure to
diversity. *Applied Mobilities* 2(1), 113-129.