

#### **URBAN FINDINGS**

### Sustained Work from Home Post-Pandemic? A Swedish Case

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### **Findings**

We investigate whether office workers will continue to work from home after COVID-19 pandemic restrictions. Office workers at Swedish public agencies were surveyed concerning the pre-pandemic experience of work from home, current practices, and willingness to continue work from home post-pandemic. Results indicate that willingness increased greatly during the pandemic. Most surveyed workers wanted to continue to work from home at least three days per week, and the greater the experience of remote work, the greater the inclination to increase the number of days of working from home. Job type, housing, public transport commuting, and living region affected the willingness.

### 1. Questions

The COVID-19 pandemic was a disruptive event that forced office workers to quickly adapt to home-based working life. In Sweden, for several months, an estimated 40% of the total workforce experienced the good and bad of teleworking on a full scale, independent of previous experience of remote work, job tasks, family situation, and how and where one lived. This shift established new habits (e.g., de Haas, Faber, and Hamersma 2020; Hiselius and Arnfalk 2021). People travelled less, missed work trips, and freed up time for other activities, reshaping everyday life. This change exploited the full capacity of information and communication technologies to support remote work and replace transport. In particular, travelling by public transport was discouraged and drastically reduced.

An important question now is whether people want and can continue to work from home, with all its conceivable consequences for people's travel and use of transport modes, as well as for family life, housing demand, and housing relocation. Some believe that increased home working will be a lasting effect of the pandemic (Felstead 2022); others are more skeptical, noting that prepandemic remote work expanded slowly, often affected only parts of the working day, and had no major impact on transport demand or housing markets (Hostettler Macias, Ravalet, and Rérat 2022; Vilhelmson and Thulin 2016). By utilizing a small-scale survey, we therefore asked the following questions:

Q1: Will the surveyed office workers be inclined to continue working from home post-pandemic and, if so, to what extent?

Q2: Does previous experience of remote work play any role in their willingness?

Q3: Do socio-demographic, job-related and spatial factors influence this willingness?

### 2. Methods

We used data from a survey of 112 office employees at two public agencies in Sweden: the Västra Götaland regional authority and the governmental agency Trafikverket. The sample was non-random and considered indicative rather than representative. The agencies were selected by convenience and the workers self-selected by voluntary response sampling. The electronic questionnaire (see Supplemental Information) was distributed via the organization's intranet. Data were collected from November to December 2021, a time that fell between two periods when Swedish authorities ordered office workers to work from home. A return to regular workplaces was possible during the study period, and employees began to reflect on their future working practices. In the survey, we asked: about *prevailing* work from home practices; *retrospectively*, about the experience of working from home pre-pandemic; and *prospectively*, about the willingness to continue working from home post-pandemic.

In the final sample, 60% of respondents were women, just over half had children living at home, and three quarters were cohabiting. Half lived in detached houses/townhouses and half in multi-unit buildings; 42% lived in a large city (i.e., Gothenburg or Stockholm) and the rest in smaller cities or rural areas. Almost all (91%) worked full-time; 90% had fully or semi-qualified (i.e., analytical) tasks, while the others had routine administrative tasks. About a third had experienced remote work at least one day a week pre-pandemic, a level slightly exceeding national estimates (Elldér 2020).

For the analysis, we used descriptive methods to document any differences in changing willingness between groups. Logistic regression was used to examine socio-demographic, job-related and spatial factors associated with willingness (variables presented in <u>Table 1</u>). Sample size limitations allowed for only five independent variables in the final model. Variables that did not produce statistically significant results were excluded.

## 3. Findings

# A large majority want to continue working from home, many at least three days a week (Q1)

Pre-pandemic, 6% of the sample worked from home three or more days per week, this share rising to 90% during pandemic restrictions. Willingness to work from home changed greatly during the pandemic (Table 2), with 58% wanting to continue working from home on a large scale at least three days per week and another 34% one to two days per week. This means that almost everyone, i.e., 93%, expressed a desire to continue working from home every week. The results indicate a major shift in preferences, with many now seeing

Table 1. Descriptive statistics: variables considered in the analysis (N=112).

Gender	Female	71	63,4%
	Male	40	35,7%
	Other	1	0,9%
Age	18-29	5	4,5%
	30-39	18	16,1%
	40-49	35	31,3%
	50-59	41	36,6%
	≥60 years	13	11,6%
Children at home	No	49	43,8%
	Yes	63	56,2%
Type of office work	Case work	12	10,7%
	Analytical	100	89,3%
WFH experience (pre pandemic)	< 1 day/week	74	66,1%
	≥ 1 days/week	38	33,9%
Willingness to WFH in the future	≥3 days/week		
	≤2 days/week		
Work status	Part-time	10	8,9%
	Full-time	102	91,1%
Housing type	Multi-unit	52	46,4%
	Detached	60	53,6%
Living in large city, Stockholm or Gothenburg	No	65	58,0%
	Yes	47	42,0%
Public transport normally used for commuting	No	66	58,9%
	Yes	46	41,1%

Table 2. Work from home practices before, during, and after COVID-19 restrictions.

		ow often did you work from How often did you work from home pre-pandemic?		How often would you like to work from home in the future?		
≥3 days/week	7	6.3%	100	89.3%	65	58.0%
1-2 days/week	31	27.7%	6	5.4%	39	34.8%
Seldom/never	74	66.1%	6	5.5%	8	7.2%
Total	112	100%	112	100%	112	100%

a future life in which the home is the primary spatial hub for working, close to other essential everyday activities—i.e., *a home-based work life*. Only 7% of all respondents did not want to work from home in the future.

# The more the remote-work experience, the more days were desired (Q2)

The desire to work from home was somewhat independent of previous remote-work experience. Still, the greater the remote-work experience, the greater the inclination to increase the number of days of such work (Figure 1). In the large group with little or no work-from-home experience pre-pandemic, most wished to continue working from home one to two (43%) or three to four days per week (41%). In the group with previous experience of working from home

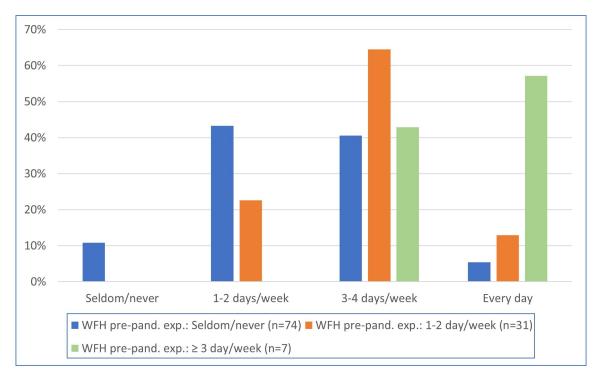


Figure 1. Willingness to work from home (WFH) in the future by pre-pandemic WFH experience.

one to two days per week, most (77%) wanted to increase this to at least three days per week. The very small group in the sample who worked from home at least three days per week pre-pandemic wanted to continue doing so, some even every day.

## Job-related and spatial background makes a difference (Q3)

To clarify the socio-demographic, job-related and spatial factors associated with wanting to perform substantial work from home, logistic regression (working from home three or more days per week vs. less often) was performed (Table 3). It confirmed that pre-pandemic work-from-home experience was indeed significantly and positively associated with wanting to continue working from home, as did whether the respondent had a qualified office job (vs. routine), lived in an apartment, in a suburb or more rural area within commuting distance of Gothenburg or Stockholm, and used public transport for commuting. We found no significant associations with demographic variables e.g., gender or having children at home.

Overall, our findings indicate a radical shift in preference for working from home reinforced by the pandemic experience. The appeal of *a home-based work life* appears strong. Whether this tendency is valid for the total population of office workers, and whether it will remain to become the "new normal"—with repercussions for mobility (e.g., travel needs, modal and destination choices, and residential moves) and the transition to sustainable urban living—requires further inquiry.

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Table 3. Logistic regression analysis of willingness to work from home (WFH) in the future.

	В	Sig.
WFH experience pre pandemic (<1 days/week = 0; ≥1 days/week = 1)	1.376***	0.007
Type of office work (case work = 0; analytical = 1)	2.985***	0.002
Housing type (multi-unit = 0; detached = 1)	-1.065*	0.094
Living in large city, Stockholm or Gothenburg (no = 0; yes = 1)	-1.285**	0.036
Public transport normally used for commuting (no = 0; yes = 1)	1.189**	0.014
Nagelkerke $R^2$ = 0.339		

Significance levels: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.10

Note: The dependent variable in this analysis is willingness coded so that 0 = would like to work from home  $\leq 2$  days/week in the future, and 1 = would like to work from  $\geq 3$  days/week in the future



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### SUPPLEMENTARY MATERIALS

## **Supplemental Information**

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