How the Shift Toward Working From Home Has Impacted People's Work and Private Life

Jonas Samuelsson, MSc, Gun Johansson, PhD, Yvonne Forsell, PhD, and Jette Möller, PhD

Objective: In this study, we aimed to describe the effect of working from home on work conditions and private life by analyzing reported changes in different work-related factors. Methods: We used descriptive analyses on cross-sectional data of 4985 people aged 20 to 67 years from Stockholm, Sweden gathered in 2021. The prevalence of reported changes for factors related to work and private life was analyzed by degree of work from home and stratified by age, sex, and educational level. Results: Participants who worked from home reported increased opportunities to structure the workday and combine work and private life, while at the same time experiencing increased isolation from the workplace. More females reported increased workload, whereas younger adults reported more changes overall. Conclusions: Working from home was related to experiencing both positive and negative changes in work conditions and private life.

Keywords: working from home, COVID-19, work-life balance, workload, pandemic, work conditions, remote work, telework, Sweden

The COVID-19 pandemic had major impacts on our society and on people's work life. Because of strategies for SARS-CoV-2 transmission control, many people started working from home (WFH) in Sweden during the pandemic. WFH denotes when employees work from home or any other remote location rather than from the workplace. According to Eurostat, the share of employees in the European Union who were mainly WFH remained constant since 2009 and was just over 5% in Sweden in 2019.1 In the second quarter of 2021, 55% of the population in Stockholm were WFH.2 A 2015 European survey found that significant determinants of WFH are high education, nonmanual occupation, and self-employment.3 Although WFH previously was an option for individuals with high autonomy over their work, mostly self-selected, it quickly became a new normal in 2020.4 This drastic change makes a study of WFH in 2020 to 2021 not entirely comparable to earlier research as it brought new and larger groups WFH and significant changes to organizations, which are important to study.

Although there is no broad consensus on the effects of WFH on organizations and employees,5 many surveys conducted before 2020 found overall positive effects for a majority of respondents.6,7 Some reasons for the positive effects were that people could benefit from less commuting and increased work-life balance, and employees with high autonomy became more efficient and had higher control over their work.6,8 WFH is generally associated with lower exhaustion and less cognitive stress, especially for those with good organizational support, job autonomy, and social connections outside work.6,9,10

On the other hand, demands of the home environment, low organizational support, low job autonomy, and high workload have been reported to make WFH a more negative experience.4,5,8,10–12 Some studies have suggested an inverted U-shaped relationship between WFH and job satisfaction, with a high level of satisfaction among those who were sometimes WFH.13 WFH reduces the opportunities to interact face-to-face with colleagues, which can increase misunderstandings and create conflicts, and also decreases perceived social support and increases a feeling of isolation.5–7,14 Reports also indicate conflicting demands between work and family roles among some people, especially for women.15 Other studies have suggested that WFH can be more beneficial for women who can combine work and domestic life,6,7 but many surveys found positive health outcomes for men but not for women.5 Some employees find that WFH encourages overtime work, which in turn affects their family role,16 and people with weaker self-efficacy in balancing work and family can have a more negative experience of WFH.17

The aim of this study was to describe the effect of WFH on other work conditions and family life by analyzing reported changes by age, sex, and educational level during the period when WFH recommendations were in place.

METHODS

Design and Material

The PART study is a longitudinal population-based study of mental health, work, and relationships in Stockholm, Sweden.18 A randomly selected cohort with baseline in 1998 was followed through several waves. In the third (2010) and fourth (2021) waves, additional random samples of 20- to 29-year-old patients were added to increase statistical power of subanalyses among younger age groups. In the fourth wave, 15,144 questionnaires were sent out in May to August 2021, and 9108 were answered (overall response rate, 60.1%). For this study, we identified a cross-sectional sample of the participants in 2021, in working age (20–67 years) and who reported to be working either as employed or self-employed (5108 participants). Furthermore, those not answering the questions about WFH were excluded resulting in 4985 participants.

Definitions

Working From Home

Information on WFH was collected by asking about how much work had been done from home during the pandemic with five possible response alternatives: "all the time," "mainly," "sometimes," "occasionally," and "never." We kept separate rate to create three levels. Information on extent of employment was also self-reported and categorized into full-time (100% or more) and part-time (less than 100%).

Work-Related Factors

Participants were asked to respond to statements about changes in work-related factors in the last year, a period which included two large waves of COVID-19 infection. The response alternatives included increased, decreased, or remained the same. The statements covered workload, support when needed, cooperation and participation at the workplace, influence and control over one's own work, and the possibility to combine work and private life. No further specifications of the statements were presented to the participants. A question asking those who were WFH if they had difficulty structuring the
workday was also included. Each variable had approximately 1% missing data.

**Sociodemographic Factors**

Information on age and sex was accessed from the longitudinal integrated database for health insurance and labor market (LISA). Age was categorized in three groups: 20–29, 30–49, and 50–67 years. Educational levels, based on self-reports, were categorized into low (elementary to practical high school programs), middle (theoretical high school programs), and high (university degree).

The study obtained ethics approval by the Swedish Ethical Review Authority (number 2021-00843 and 2021-02047), and informed consent was obtained from all the participants.

**Statistical Analysis**

Descriptive analyses were performed and presented in frequency tables estimating prevalence and 95% confidence intervals. First, the study population was presented in Table 1 with extent of employment and how much they were WFH during the pandemic. Then, analysis of how different work-related factors changed over the last year was performed. Reported increases and decreases by level of WFH were presented by age, sex, and level of education in Tables 2 to 4. The remaining percentages that are not presented are either unchanged (approximately 50%–75%) or missing (approximately 1%). The results for the question about structural changes during the day were presented in text and in Appendix Table 1, http://links.lww.com/JOM/B146. All statistical analyses were performed using the R software.

**RESULTS**

Just under half of the participants (48%) were 50 years or older, 65% were highly educated, and 58% were female (see Table 1). Approximately 87% reported to be working full-time in 2021, and part-time work was most common among participants younger than 30 years. Overall, our results show that 67% of respondents were WFH at least sometimes during the pandemic and 45% were mainly WFH. People aged 20 to 29 years were mainly WFH to a lesser extent (19%) compared with the older age groups (51% for 30–49 years and 47% for 50–67 years). No clear differences were found between males and females, but the highly educated WFH group was in greater numbers (54%) than those with other educational levels.

A smaller proportion of those who were mainly WFH reported a decrease in workload than those who were never WFH, and among those who were mainly WFH, a larger proportion of 20- to 29-year-old patients reported an increase than the 50- to 67-year-old patients (Table 2). Females reported a higher increase in workload than males irrespectively of whether they were WFH (Table 3). There were also differences for educational levels, with a larger proportion of highly educated reporting an increase in workload than participants with low education, both among those who were mainly and never WFH (Table 4).

**TABLE 1.** Study Population by Extent of Employment and Working From Home, Stratified by Age Group, Sex, and Educational Level (Prevalence %, 95% Confidence Intervals)

| Age Group | Educational Level | N | % | Low (95% CI) | Middle (95% CI) | High (95% CI) |
|-----------|-------------------|---|---|-------------|----------------|-------------|
| Total     |                   |   |   |             |                |             |
| 20–29     | Low               | 4985 | 998 | 100.0 (99.6–100.0) | 32.5 (31.5–33.5) | 47.5 (46.5–48.5) |
|           | Middle            |   | 2084 | 97.9 (97.0–98.9) | 51.9 (50.9–53.0) | 48.1 (47.1–49.1) |
|           | High              |   | 1351 | 90.3 (89.4–91.3) | 57.9 (56.8–59.0) | 42.1 (41.1–43.1) |
| 30–49     | Low               | 998 | 2062 | 100.0 (99.6–100.0) | 32.5 (31.5–33.5) | 47.5 (46.5–48.5) |
|           | Middle            |   | 1062 | 97.9 (97.0–98.9) | 51.9 (50.9–53.0) | 48.1 (47.1–49.1) |
|           | High              |   | 1021 | 90.3 (89.4–91.3) | 57.9 (56.8–59.0) | 42.1 (41.1–43.1) |
| 50–67     | Low               | 2567 | 2567 | 100.0 (99.6–100.0) | 32.5 (31.5–33.5) | 47.5 (46.5–48.5) |
|           | Middle            |   | 2567 | 97.9 (97.0–98.9) | 51.9 (50.9–53.0) | 48.1 (47.1–49.1) |
|           | High              |   | 2567 | 90.3 (89.4–91.3) | 57.9 (56.8–59.0) | 42.1 (41.1–43.1) |

**© 2022 American College of Occupational and Environmental Medicine**
| Age Group | Workload | Support when needed | Cooperation at the workplace | Participation at the workplace | Influence and control over one's own work | Possibility to balance work and private life |
|-----------|----------|---------------------|-----------------------------|--------------------------------|----------------------------------------|-------------------------------------------|
|           | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) |
| N | Mainly | Sometimes | Never | Mainly | Sometimes | Never | Mainly | Sometimes | Never | Mainly | Sometimes | Never | Mainly | Sometimes | Never |
| 20–29 | 333 | 823 | 1104 | 187 | 372 | 501 | 478 | 425 | 762 |
| Workload | Increased | 37.1 (34.1–40.1) | 37.4 (35.1–39.8) | 34.1 (32.3–36.1) | 39.0 (33.9–44.4) | 34.6 (31.5–38.0) | 31.1 (28.4–33.9) | 32.6 (26.3–39.7) | 39.0 (34.1–44.0) | 34.9 (30.9–39.2) |
|          | Decreased | 11.3 (9.5–13.4) | 12.5 (11.0–14.2) | 15.9 (14.5–17.4) | 8.4 (5.9–11.9) | 11.5 (9.5–13.9) | 16.0 (14.0–18.3) | 11.8 (7.9–17.2) | 142 (11.0–18.2) | 16.6 (13.6–20.1) |
| Support when needed | Increased | 14.6 (12.6–17.0) | 12.1 (10.6–13.8) | 8.8 (7.8–10.0) | 15.0 (11.6–19.3) | 11.8 (9.8–14.2) | 8.3 (6.8–10.1) | 13.9 (9.6–19.7) | 13.4 (10.3–17.3) | 7.6 (5.6–10.3) |
|          | Decreased | 16.7 (14.5–19.2) | 18.6 (16.8–20.6) | 13.8 (12.4–15.2) | 22.8 (18.6–27.6) | 21.0 (18.4–23.9) | 15.9 (13.8–18.1) | 15.0 (10.5–20.9) | 17.2 (13.7–21.4) | 13.2 (10.5–16.4) |
| Cooperation at the workplace | Increased | 18.2 (16.0–20.8) | 17.3 (15.5–19.2) | 13.1 (11.8–14.6) | 15.0 (11.6–19.3) | 14.8 (12.6–17.4) | 10.8 (9.1–12.8) | 17.1 (12.3–22.2) | 20.7 (16.9–25.1) | 13.8 (11.0–17.1) |
|          | Decreased | 20.3 (18.0–23.0) | 28.4 (26.3–30.6) | 22.3 (20.7–24.1) | 34.8 (29.9–40.1) | 40.2 (36.9–43.6) | 32.4 (29.7–35.3) | 16.6 (11.9–22.6) | 18.8 (15.2–23.1) | 21.6 (18.2–25.4) |
| Participation at the workplace | Increased | 16.8 (14.6–19.3) | 13.8 (12.2–15.6) | 10.1 (8.9–11.3) | 15.3 (11.8–19.6) | 12.8 (10.6–15.2) | 8.1 (6.6–9.8) | 20.3 (15.1–26.7) | 16.1 (12.7–20.2) | 11.8 (9.2–14.9) |
|          | Decreased | 19.1 (16.8–21.7) | 25.6 (23.5–27.8) | 21.2 (19.6–22.9) | 32.7 (27.9–38.0) | 35.4 (32.2–38.7) | 31.2 (28.6–34.0) | 16.0 (11.4–22.0) | 19.4 (15.6–23.7) | 16.6 (13.6–20.1) |
| Influence and control over one's own work | Increased | 23.5 (21.0–26.3) | 18.8 (17.0–20.8) | 12.5 (11.3–13.9) | 34.8 (29.9–40.1) | 23.3 (20.6–26.3) | 15.3 (13.3–17.6) | 26.2 (20.4–33.0) | 18.3 (14.7–22.5) | 10.4 (8.0–13.4) |
|          | Decreased | 9.4 (7.8–11.4) | 8.2 (7.0–9.7) | 6.8 (5.9–7.9) | 9.0 (6.4–12.6) | 7.3 (5.7–9.3) | 5.9 (4.6–7.4) | 8.0 (4.9–12.9) | 6.7 (4.6–9.8) | 6.8 (4.9–9.4) |
| Possibility to balance work and private life | Increased | 17.7 (15.5–20.2) | 31.5 (29.3–33.8) | 22.2 (20.6–23.9) | 34.2 (29.3–39.5) | 51.2 (47.7–54.6) | 37.9 (35.0–40.8) | 16.0 (11.4–22.0) | 17.7 (14.2–22.0) | 13.4 (10.7–16.7) |
|          | Decreased | 15.1 (13.0–17.5) | 13.5 (11.9–15.2) | 10.6 (9.4–11.9) | 13.2 (10.0–17.3) | 10.8 (8.9–13.1) | 9.2 (7.7–11.1) | 13.4 (9.2–19.1) | 13.4 (10.3–17.3) | 10.6 (8.2–13.6) |
TABLE 3. Changes in Work Conditions by Degree of Working From Home and Sex (%; 95% Confidence Intervals)

|                | Working From Home |         |         |         | Not at All |         |         |         |
|----------------|-------------------|---------|---------|---------|------------|---------|---------|---------|
|                | Mainly            | Sometimes | Not at All |
|                | Female | Male | Female | Male | Female | Male | Female | Male |
| N              | 1322   | 938  | 618    | 442   | 944     | 721   |
| Workload       |         |       |         |       |         |       |         |       |
| Increased      | 40.8 (39.1–42.7) | 28.8 (26.9–30.8) | 37.1 (34.6–39.8) | 28.5 (25.7–31.4) | 41.1 (37.3–45.0) | 28.7 (24.7–33.1) |
| Decreased      | 12.8 (11.6–14.1) | 15.4 (13.9–17.0) | 12.0 (10.4–13.9) | 15.0 (12.9–17.5) | 14.1 (11.5–17.1) | 16.1 (12.9–19.8) |
| Support when needed |       |       |         |       |         |       |         |       |
| Increased      | 12.0 (10.8–13.2) | 9.8 (8.6–11.2) | 10.7 (9.2–12.5) | 10.3 (8.5–12.5) | 12.0 (9.6–14.8) | 9.0 (6.7–12.1) |
| Decreased      | 17.6 (16.3–19.1) | 13.6 (12.2–15.1) | 20.0 (18.0–22.3) | 17.0 (14.7–19.5) | 14.9 (12.3–17.9) | 14.9 (11.9–18.6) |
| Cooperation at the workplace |       |       |         |       |         |       |         |       |
| Increased      | 16.7 (15.4–18.1) | 13.9 (12.5–15.4) | 13.3 (11.6–15.3) | 12.3 (10.3–14.5) | 17.0 (14.2–20.2) | 16.5 (13.3–20.3) |
| Decreased      | 24.5 (23.0–26.2) | 23.0 (21.3–24.9) | 35.9 (33.3–38.5) | 35.3 (32.3–38.4) | 19.9 (16.9–23.2) | 19.5 (16.0–23.4) |
| Participation at the workplace |       |       |         |       |         |       |         |       |
| Increased      | 13.4 (12.2–14.7) | 11.6 (10.3–13.1) | 11.3 (9.7–13.1) | 10.2 (8.4–12.3) | 15.4 (12.7–18.4) | 14.0 (11.1–17.6) |
| Decreased      | 24.3 (22.8–25.9) | 19.3 (17.7–21.1) | 34.8 (32.3–37.4) | 30.4 (27.5–33.4) | 18.8 (15.9–22.1) | 15.6 (12.5–19.3) |
| Influence and control over one's own work |       |       |         |       |         |       |         |       |
| Increased      | 17.3 (16.0–18.7) | 16.1 (14.6–17.7) | 21.8 (19.6–24.1) | 20.1 (17.7–22.8) | 15.9 (13.2–19.0) | 16.1 (12.9–19.8) |
| Decreased      | 9.0 (8.0–10.1)    | 6.1 (5.2–7.3) | 7.2 (5.9–8.7) | 6.4 (5.0–8.2) | 8.7 (6.7–11.2) | 4.5 (2.9–6.9) |
| Possibility to balance work and private life |       |       |         |       |         |       |         |       |
| Increased      | 24.1 (22.6–25.7) | 24.7 (22.9–26.5) | 41.6 (39.0–44.3) | 43.0 (39.8–46.2) | 15.2 (12.6–18.3) | 15.6 (12.5–19.3) |
| Decreased      | 14.1 (12.9–15.4) | 10.1 (8.9–11.5) | 11.3 (9.7–13.2) | 9.1 (7.4–11.1) | 13.9 (11.4–16.9) | 9.5 (7.1–12.6) |

DISCUSSION

Our results reveal new insights from the WFH recommendations enforced during the pandemic. People who were WFH reported greater control over work and private life while also reporting decreased cooperation, participation, and support when needed. Sex differences in the proportion of participants who reported changes were observed for several of the work-related factors. Workload was reported to have increased for a substantially larger proportion of women than men regardless of whether they were WFH, something which has also been reported recently in another Swedish survey. Among those who were never WFH, a larger proportion of women than men reported decreased: possibility to combine work and private life, support when needed, participation at the workplace, and influence and control over one's own work. Potentially, this could be explained by sex differences in the health care sector and experience of stress and overtime work. For a large proportion of people who were WFH, cooperation, participation, and support were reported to have decreased than increased. Among those who were WFH, a larger proportion of the youngest age group reported both an increase and decrease in these factors than the older age groups. As previous research found, the lack of face-to-face interaction with colleagues may lead to a feeling of social isolation and has thus been one of the major negative effects of WFH. The relatively polarized experience among younger adults also highlights how the WFH recommendations have impacted work and private life for them more than for any other age group.

Our results show that WFH provide opportunities to structure one's life, which is in line with previous research. Whether or not people benefited from this may depend on the demands at home and the preference for segmentation, which has been associated with greater living circumstances as young adults are more likely to live with parents or share housing with others.

STRENGTHS AND LIMITATIONS

This study is based on a quite large population sample that covers the working-age population and was collected during the COVID-19 pandemic when recommendations to WFH were in place. It covers several aspects of the working environment that are essential for a constructive work situation, and thus gives valuable insights into how people have experienced the large changes during the pandemic. The highly educated reported a decrease in cooperation than lower educational levels (Table 4).

Reported influence and control over one's own work increased for more participants than decreased among those who were WFH at least sometimes. The increase in influence and control was highest among 20- to 29-year-old patients who were mainly or sometimes WFH (Table 2), and there were no differences in sex and educational level for those who were WFH (Tables 3 and 4).

Among those who were mainly WFH, a larger proportion of participants reported an increase than a decrease in their possibility to combine work and private life. An increase was most common in the 30 to 49 years age group who were mainly WFH (Table 2), and there were no differences in sex and educational level for those who were WFH (Tables 3 and 4).

Just over half of the participants reported difficulties structuring the workday while WFH, but only 8% found it difficult most of the time (Appendix Table 1, http://links.lww.com/JOM/B146). Individuals aged 50 to 67 years had the highest proportion of individuals who reported no difficulties (55%), whereas the same number was 42% for 30 to 49 years and 32% for 20 to 29 years. A lower proportion of the highly educated reported that they had no difficulty compared with the other educational level.

For a large proportion of people who were WFH, cooperation, participation, and support were reported to have decreased than increased. Among those who were WFH, a larger proportion of the youngest age group reported both an increase and decrease in these factors than the older age groups. As previous research found, the lack of face-to-face interaction with colleagues may lead to a feeling of social isolation and has thus been one of the major negative effects of WFH. The relatively polarized experience among younger adults also highlights how the WFH recommendations have impacted work and private life for them more than for any other age group.

Our results show that WFH provide opportunities to structure one's life, which is in line with previous research. Whether or not people benefited from this may depend on the demands at home and the preference for segmentation, which has been associated with greater work-nonwork balance. A related potential positive effect of WFH turned out to be a reported increase in people's influence and control over their own work, which seems to be the case particularly for younger people. However, structuring the workday at home was reported as difficult by a larger proportion of participants younger than 30 years than their older counterparts. WFH thus gave greater autonomy over work for many people; however, for some, this may have made work more difficult to structure. A Swedish survey conducted during the pandemic also found that younger age groups were more polarized in their experience. This result might depend on distracting living circumstances as young adults are more likely to live with parents or share housing with others.
### TABLE 4. Changes in Work Conditions by Degree of Working From Home and Educational Level (%, 95% Confidence Intervals)

| Educational Level | Mainly | Sometimes | Never |
|------------------|--------|-----------|-------|
|                   | Low (N) | Middle (N) | High (N) | Low (N) | Middle (N) | High (N) | Low (N) | Middle (N) | High (N) |
| N                | 124 | 402 | 1727 | 109 | 192 | 750 | 439 | 493 | 726 |
| Workload         | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) |
| Increased        | 28.0 (24.7–31.5) | 32.5 (29.8–35.3) | 38.5 (36.9–40.2) | 21.0 (14.7–29.1) | 31.6 (27.2–36.3) | 34.9 (32.6–37.1) | 31.2 (23.2–40.5) | 29.2 (23.2–36.0) | 38.5 (35.1–42.1) |
| Decreased        | 17.9 (15.1–20.9) | 16.5 (14.4–18.8) | 12.2 (11.1–13.4) | 20.2 (14.0–28.2) | 14.4 (11.3–18.2) | 12.4 (11.0–14.1) | 20.2 (13.6–28.8) | 22.4 (17.0–28.9) | 12.4 (10.2–15.0) |
| Support when needed | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) |
| Increased        | 10.3 (8.2–12.8) | 13.2 (11.4–15.4) | 10.5 (9.5–11.6) | 8.1 (4.4–14.4) | 12.7 (9.8–16.3) | 10.2 (8.9–11.8) | 11.9 (7.0–19.5) | 14.1 (9.8–19.8) | 9.9 (7.9–12.2) |
| Decreased        | 10.6 (8.5–13.1) | 12.7 (10.8–14.8) | 18.2 (16.9–19.5) | 10.5 (6.2–17.3) | 15.9 (12.7–19.8) | 20.0 (18.2–22.0) | 14.7 (9.2–22.7) | 8.9 (5.6–13.8) | 16.4 (13.9–19.2) |
| Cooperation at the workplace | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) |
| Increased        | 14.7 (12.2–17.6) | 17.6 (15.4–20.0) | 14.9 (13.7–16.2) | 13.7 (8.7–21.0) | 15.9 (12.7–19.8) | 12.0 (10.6–13.7) | 14.7 (9.2–22.7) | 19.3 (14.3–25.5) | 16.4 (13.9–19.2) |
| Decreased        | 12.2 (9.9–14.9) | 16.6 (14.5–18.9) | 19.6 (17.2–22.1) | 24.2 (17.4–32.5) | 28.9 (24.6–33.5) | 38.0 (35.8–40.4) | 10.1 (5.7–17.4) | 12.0 (8.1–17.4) | 23.2 (20.3–26.4) |
| Participation at the workplace | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) |
| Increased        | 12.9 (10.6–15.7) | 14.0 (12.0–16.2) | 12.1 (11.0–13.3) | 10.5 (6.2–17.3) | 13.2 (10.2–16.9) | 10.3 (9.0–11.8) | 17.4 (11.4–25.8) | 16.1 (11.6–22.1) | 14.1 (11.8–16.8) |
| Decreased        | 11.5 (9.3–14.1) | 16.7 (14.6–19.0) | 26.4 (24.9–27.9) | 28.2 (21.0–36.8) | 27.9 (23.7–32.5) | 34.5 (32.2–36.7) | 11.9 (7.0–19.5) | 10.4 (6.8–15.6) | 20.1 (17.4–23.2) |
| Influence and control over one's own work | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) |
| Increased        | 14.3 (11.8–17.1) | 16.3 (14.2–18.6) | 17.5 (16.2–18.8) | 16.9 (11.3–24.6) | 20.6 (17.0–24.9) | 21.5 (19.7–23.5) | 22.0 (15.2–30.8) | 167 (120–22.6) | 14.9 (12.6–17.7) |
| Decreased        | 5.5 (4.0–7.5) | 6.9 (5.5–8.6) | 8.6 (7.7–9.6) | 7.3 (3.8–13.4) | 5.5 (3.6–8.2) | 7.2 (6.1–8.5) | 3.7 (1.4–9.4) | 5.2 (2.8–9.4) | 7.9 (6.1–10.0) |
| Possibility to combine work and private life | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) | % (95% CI) |
| Increased        | 12.2 (9.9–14.9) | 21.1 (18.7–23.6) | 28.1 (26.6–29.7) | 35.5 (27.5–44.3) | 39.8 (35.1–44.7) | 43.3 (40.9–46.5) | 14.7 (9.2–22.7) | 18.2 (13.4–24.4) | 14.9 (12.6–17.7) |
| Decreased        | 10.4 (8.3–13.0) | 10.5 (8.8–12.5) | 13.5 (12.3–14.7) | 4.8 (2.2–10.4) | 7.5 (5.3–10.5) | 11.5 (10.0–13.1) | 10.1 (5.7–17.4) | 9.4 (6.0–14.4) | 13.2 (11.0–15.8) |
One limitation of this cross-sectional study is that we do not know if the increases in the work-related factors are directly related to WFH or other societal changes. For example, influence and control or workload might generally increase for some people even under nonpandemic years, possibly exaggerating the overall number of participants who experienced an increase. Approximately 13% of the participants changed workplace during the last year and could consequently have experienced changes in the studied factors, also leading to a possible overestimation of effects related to the pandemic. It is however unlikely that a majority changed to jobs with higher workload and autonomy. It is also possible that compliance to the recommendations changed during the study period as the rate of infection changed. Perhaps some people who were sometimes WFH during parts of the pandemic were mainly WFH during other parts. However, as the participants were asked how much they were WFH during the pandemic, it probably had little impact on the results. One downside of self-reported information is that some people may have answered that they were WFH more than they actually did, as it could be seen as socially desirable to follow the recommendations. If that is the case, the changes in working conditions may be less attributable to mainly WFH than our results suggest.

One possible source of bias was differential response rate, which was much lower for males and the younger age groups. An analysis of the second wave of the PART study found that nonresponse was related to low income, low education, and previous psychiatric diagnosis. Although there was an underrepresentation of the previously stated population and likely an overrepresentation of people who were WFH, it is unlikely that it affects the association with other work conditions and family life. In terms of occupations, there were no major differences between the participants and the general population of Stockholm.

Swedish authorities handled the pandemic differently than other European countries with relatively few restrictions and relying more on recommendations to curb the spread of infection. Another difference that distinguished Sweden from other European countries was that there was only temporary closing of schools, and younger children went to school as before the pandemic. Scaling up WFH might have been easier in Sweden compared with some other countries since Sweden topped the European list of how many people had at least some experience with WFH before the pandemic, although with large differences related to type of work tasks. However, since work environments are expected to be similar to other European contexts, we expect our results on the effects of WFH to be generalizable.

CONCLUSIONS

In this population-based study, we found that WFH was associated with increased opportunities to structure the workday and combine work and private life, while at the same time decreasing cooperation, participation, and support when needed. The trend toward WFH is expected to continue even as the pandemic winds down, and this study may provide useful information for organizations and authorities in adapting to the new circumstances.

REFERENCES

1. How usual is it to work from home? Eurostat. 2020. Available at: https://ec.europa.eu/eurostat/web/products-eurostat-news/-/WD-DIN202000424-1. Accessed January 20, 2022.
2. Allt fler arbetar hemifrån. Available at: http://www.scb.se/pressmeddelande/allt-fler-arbetar-hemifrån/. Accessed February 4, 2022.
3. Østergaard P, Rodriguez-Mordoño P, Who is teleworking and where from? Exploring the main determinants of telework in Europe. Sustainability 2020;2020:8797.
4. Wang B, Liu Y, Qian J, et al. Achieving effective remote working during the COVID-19 pandemic: a work design perspective. Appl Psychol 2021;70:16–59.
5. Oakman J, Kinsman N, Stacey R, et al. A rapid review of mental and physical health effects of working at home: how do we optimise health? BMC Public Health 2020;20:1825.
6. Athanasiaoudou C, Theriou G. Telework: systematic literature review and future research agenda. Helixon 2021;7:e08165.
7. Chantalampous M, Grant CA, Tramontano C, et al. Systematically reviewing remote e-workers’ well-being at work: a multidimensional approach. Eur J Work Organ Psychol 2019;28:51–73.
8. Ipsen C, van Veldhoven M, Kirchner K, et al. Six key advantages and disadvantages of working from home in Europe during COVID-19. Int J Environ Res Public Health 2021;18:1826.
9. Sardeshmukh SR, Sharma D, Golden TD. Impact of telework on exhaustion and job engagement: a job demands and job resources model. New Technol Work Employ 2012;27:193–207.
10. Bentley TA, Teo ST, McLeod L, et al. The role of organisational support in teleworker wellbeing: a socio-technical systems approach. Appl Ergonom 2016;52:207–215.
11. Allen TD, Merlo K, Lawrence RC, et al. Boundary management and work-nonwork balance while working from home. Appl Psychol 2021;70:60–84.
12. Vander Elst T, Verhoogen R, Sercu M, et al. Not extent of telecommuting, but job characteristics as proximal predictors of work-related well-being. J Occup Environ Med. 2017;59:e180–e186.
13. Golden TD, Veiga JF. The impact of telecommuting on job satisfaction: resolving inconsistent findings. J Manag. 2005;31:301–318.
14. Kuntz JC. Resilience in times of global pandemic: steering recovery and thriving trajectories. Appl Psychol. 2021;70:188–215.
15. Yuell D, Chung H. Working from home, work-family conflict, and the role of gender and gender role attitudes. Community Work Fam. 2021;1:1–32.
16. Eddleston KA, Mulki J. Toward understanding remote workers’ management of work-family boundaries: the complexity of workplace embeddedness. Group Organ Manag. 2017;42:346–387.
17. Lapierrre LM, van Steenberghe EF, Peeters MCW, et al. Juggling work and family responsibilities when involuntarily working more from home: a multivariate study of financial sales professionals. J Organ Behav. 2016;37:804–822.
18. Bergman P, Ahlberg G, Forsell Y, et al. Non-participation in the second wave of the PART study on mental disorder and its effects on risk estimates. Int J Soc Psychiatry. 2010;56:119–123.
19. Longitudinal integrated database for health insurance and labour market studies. SCB. 2019. Available at: https://www.scb.se/en/services/ordering-data-and-statistics/longitudinal-integrated-database-for-health-insurance-and-labour-market-studies-lisa/. Accessed March 25, 2022.
20. Eddleston KA, Mulki J. Toward understanding remote workers’ management of work-family boundaries: the complexity of workplace embeddedness. Group Organ Manag. 2017;42:346–387.
21. Bergman P, Ahlberg G, Forsell Y, et al. Non-participation in the second wave of the part study on mental disorder and its effects on risk estimates. Int J Soc Psychiatry. 2010;56:119–123.
22. Longitudinal integrated database for health insurance and labour market studies. SCB. 2019. Available at: https://www.scb.se/en/services/ordering-data-and-statistics/longitudinal-integrated-database-for-health-insurance-and-labour-market-studies-lisa/. Accessed March 25, 2022.
23. Pikkulinna J, Pikkulinna R. Scoping review of psychosocial risks to health workers during the Covid-19 pandemic: a work design perspective. Appl Psychol 2021;70:16–59.
24. Oakman J, Kinsman N, Stacey R, et al. A rapid review of mental and physical health effects of working at home: how do we optimise health? BMC Public Health 2020;20:1825.
25. Sardeshmukh SR, Sharma D, Golden TD. Impact of telework on exhaustion and job engagement: a job demands and job resources model. New Technol Work Employ 2012;27:193–207.
26. Bentley TA, Teo ST, McLeod L, et al. The role of organisational support in teleworker wellbeing: a socio-technical systems approach. Appl Ergonom 2016;52:207–215.
27. Allen TD, Merlo K, Lawrence RC, et al. Boundary management and work-nonwork balance while working from home. Appl Psychol 2021;70:60–84.