

New work, new problems? An investigation into teleworking and its relationship with gender, mobility and well-being

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Introduction to teleworking

Teleworking is understood as paid work activities that are done outside the traditional workplace (Morganson et al. 2010).

Teleworking has some **advantages** such as autonomy, efficiency and productivity (Vayre et al. 2022), or coordination between paid work and personal or family needs.

In the context of teleworking, individual well-being is often discussed in relation to **paid work-life wellness** and as a way of improving their paid work-life balance (Ravalet & Rérat 2019; Haddad et al. 2009; Mokhtarian & Salomon 1997).

The terms 'work-life balance' and 'work-life wellness' reference the **ability to be well** in different aspects of life and to feel well about the connection between one's paid work and one's non-work life (Como et al. 2021; Brough et al. 2020; Como & Domene 2023), thus contributing to individual well-being.

Teleworking may increase worker and family **well-being** when the time saved by not commuting can be used for additional activities, such as social interactions, the organization of housework or child care (Pabilonia & Vernon 2022).

Study aim and research question

Empirical studies have sought to determine the influence of teleworking on the work–life balance and well-being with mixed results (Vayre et al. 2022; Zhang et al. 2020).

Individuals play **multiple roles** simultaneously in their daily lives, which can lead to conflicts between paid work and life or family relations (Greenhaus & Beutell 1985; Sirgy & Lee 2016; Zhang et al. 2020).

From our point of view, it should be realized that there are **complex relationships** between gender, teleworking, everyday mobility practices, and well-being. Against this background, we ask the following **research questions**:

- How is teleworking applied and interwoven into the various spheres of life from a gender perspective?
- What differences are apparent in the frequency of teleworking, the reasons why, or the advantages and disadvantages of teleworking by gender?
- Does teleworking lead to a better coordination between paid work and life due to the reduction in commuting time and thus improving individual well-being?

Literature review – teleworking, mobility and gender

In the context of teleworking research, aspects of **mobility** such as commuting frequency, distance and duration are central.

Daily activity patterns, as captured in space and time, result from gendered identities. Different tasks must be completed in a given time and within a given budget (Hägerstrand 1970).

In Switzerland, **teleworkers** commute longer distances than non-teleworkers (Ravalet & Rérat 2019), and therefore have longer durations per trip.

In general, many studies have uncovered **gender differences** in travel time and/or distance from paid work (Cristaldi 2005; Schwanen et al. 2002; Parnell et al. 2022), mode of travel (Polk 2004; Rosenbloom 2006; Vance & Iovanna 2007), travel patterns, and the links between trips and the reasons for taking them (Rosenbloom 2006).

Bergstad et al. (2011) show that satisfaction with daily travel influences **subjective well-being**. Such approaches have led to the hypothesis that changes in commuting (e.g. less frequently, shorter duration) influence subjective well-being.

Literature review – teleworking, well-being and gender

In the context of teleworking, well-being is often discussed in relation **to paid work-life wellness or family and paid work conflicts** (e.g. Como & Domene 2023; Zhang et al. 2020).

Workers have certain resources of time at their disposal and different roles in paid work and (family) life (Frone 2003; Morris & Madsen 2007). Through teleworking they acquire the **spatial flexibility and autonomy** to control their time schedules.

Improving the paid work-life balance is one of the important **drivers** of teleworking (Haddad et al. 2009; Mokhtarian & Salomon 1997; Aguilera et al. 2016).

On the one hand, teleworking provides **more flexible paid work arrangements**, which benefits the paid work-life balance and reduces conflicts (Allen et al. 2015). On the other hand, **teleworking blurs the spatial boundaries** between paid work and home and therefore potentially increases paid work-family conflicts (Mann & Holdsworth 2003; Russell et al. 2009).

However, teleworking also affects how workers **allocate their time in the course of the day**. Working from home results in a shift from paid work activities to unpaid work and leisure activities during core working hours (Giménez-Nadal et al. 2020).

Study background

The Covid-19 pandemic intervened to boost teleworking in public administrations (Edelmann et al. 2021; Fischer et al. 2020; Moser et al. 2021).

Many employees of the city administration found themselves regularly working from home for the first time during the Covid-19 pandemic. Teleworking is a **new way** of organizing their work in comparison to other work domains.

The city administration wants to promote and enable teleworking. In order to gain insights, the study involved a survey of employees to find out about their experiences and challenges in dealing with teleworking.

The city administration wrote directly to 516 employees inviting them to participate in the survey. The **employees** who were contacted had an official personal mailing address of the city administration and were eligible for teleworking in view of their (partial) office activity.

The survey ran between **September 2022 and November 2022**. During this period 278 people completed the questionnaire, resulting in a **response rate of 54 percent**.

Gender perspective of teleworking

	Total	Male		Female		<i>Sig.</i>
Gender		39 %		61%		
Age	44 years	46 years		43 years		*
Children (yes)	44%	46%		44%		
Employment rate	75%	84%		69%		**
<i>How often do you do teleworking? (children no/yes)</i>						
		<i>no</i>	<i>yes</i>	<i>no</i>	<i>yes</i>	
1 Never	27%	34%	24%	23%	27%	
2 Vary rarely (2-3 per year)	20%	24%	18%	21%	18%	
3 Rarely (approx. 1 per month)	14%	14%	18%	11%	16%	
4 Often (about 3-4 times per month)	8%	10%	6%	8%	7%	
5 Regularly (at least 1 time per week)	22%	12%	29%	26%	22%	
6 Very often (several times per week)	8%	5%	4%	10%	11%	
Average (1-6)	3.0	2.6	3.1	3.3	3.1	

ANOVA

n=277

** = The difference is significant at the 0.01 level ($p < .01$, 2-sided).

* = The difference is significant at the 0.05 level ($p < .05$, 2-sided).

Gender perspective of teleworking

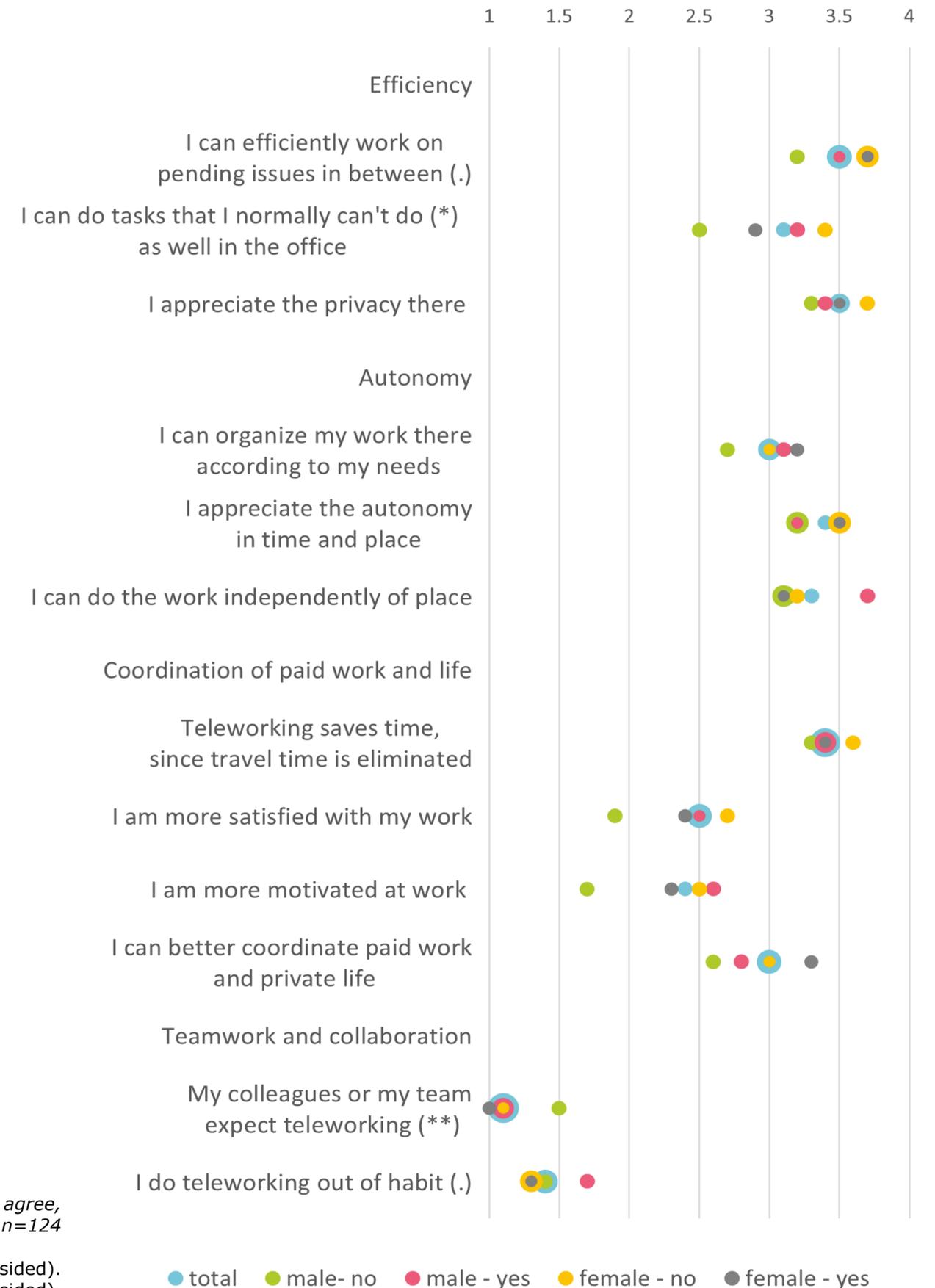
Attitudes towards reason for teleworking

The **reasons for teleworking** are the ability to work efficiently, greater independence in terms of time and location, and the time saved by eliminating travel time.

Female teleworkers consider efficiency and the lack of disruption to be more important, they can coordinate their paid working and private lives better, and they can organize their paid work according to their own needs.

For **male teleworkers**, the most important reason, additionally, is that they can work from any location.

The results show that, in the **specific context** of the administration, teleworking is not done because of the expectations of others or out of habit.



1-4 Likert scale; 1 does not apply, 2 does not apply very much, 3 strongly agree, 4 fully agree, children (yes/no); n=124

ANOVA; ** = The difference is significant at the 0.01 level (p < .01, 2-sided).
 * = The difference is significant at the 0.05 level (p < .05, 2-sided).
 . = The difference is significant at the 0.10 level (p < .10, 2-sided).

Teleworking, mobility and gender

	Total		Male		Female		<i>Sig.</i>
<i>How long does it usually take you to get there and back from your home to your main place of work?</i>							
0 – 15 minutes	31%		29%		33%		
16 – 30 minutes	31%		36%		28%		
31 – 60 minutes	30%		25%		34%		
61+ minutes	8%		10%		6%		
<hr/>							
<i>Average commuting time (in minutes)</i>	30		31		29		
<hr/>							
<i>Commuting time by teleworking (no/yes, in minutes)</i>	<i>no</i>	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>	<i>yes</i>	
	27	35	27	39	26	33	*
ANOVA: * = The difference is significant at the 0.05 level ($p < .05$, 2-sided).							n=277

Teleworking, well-being and gender

	Total	Male	Female
No saved time	11 (8%)	4 (8%)	7 (7%)
Paid work-related (More work, flexible work)	31 (22%)	10 (20%)	21 (22%)
Coordination of paid work and life	68 (48%)	23 (47%)	45 (48%)
Private affairs, medical visits, etc.	8	3	5
Household-related tasks (childcare, household work, shopping)	22	2	20
Social interactions, friends, families	16	8	8
General leisure, hobbies	22	10	12
Work-life balance / well-being	33 (23%)	12 (24%)	21 (22%)
Sport	12	6	7
Sleeping	4	1	3
Work-life-balance	4	2	2
Personal care	12	3	9
	n=143	n=49	n=94

Teleworking, well-being and gender

<i>children</i>	Total	Male		Female		<i>Sig.</i>
		<i>no</i>	<i>yes</i>	<i>no</i>	<i>yes</i>	
<i>What is your attitude towards teleworking? (1-4 Likert scale)</i>						* (1)
4 Very positive	47%	41%	50%	41%	59%	
Average (1-4)	3.3	3.1	3.3	3.3	3.5	. (2)
<i>How would you like to work in the future?</i>						
I'd like to continue teleworking regularly	35%	24%	33%	34%	47%	
I'd like to telework primarily for special tasks	33%	36%	29%	35%	30%	
I'd like to work mainly at main office	17%	24%	18%	18%	11%	
<i>How relevant is the possibility for you to be able to telework in a next job? (1-4 Likert scale)</i>						* (1)
1 Absolutely important	20%	10%	22%	22%	23%	
2 Rather important	41%	43%	27%	42%	49%	
3 Rather not important	26%	24%	33%	26%	23%	
4 Not important	13%	22%	18%	9%	5%	
Average (1-4)	2.3	2.6	2.5	2.2	2.1	* (2)

(1) Pearson Chi-Square Test, (2) ANOVA

* = The difference is significant at the 0.05 level ($p < .05$, 2-sided).

. = The difference is significant at the 0.10 level ($p < .05$, 2-sided).

n=277

Conclusion & outlook

To sum up, the results that woman and employees with children tend to telework more often than others and have positive experiences in dealing with teleworking. Therefore, it can be concluded that **teleworking contributes to the coordination of paid work and life and thus to individual well-being.**

Regarding the gender perspective the aspect of coordination of paid work and (family) life is an important reason for teleworking, with woman also using the time saved by teleworking for household-related tasks. Keeping this in mind can be important in **promoting labor market capability for women and employees with children.**

In terms of content, the study looks at how teleworking is used in a city administration. **Public administrations** are often different from private companies (Boyne 2002). The way telework is used also depends on the company and its work culture (Krasilnikova & Levin-Keitel 2022).

More research is needed on the effects of teleworking on mobility patterns and individual well-being. Moreover, longer periods of analysis and a holistic view of mobility are useful.

- Daily activity patterns are part of weekly or monthly patterns and take place in households.
- To subject mandatory and non-mandatory activities (Viana Cerqueira & Motte-Baumvol 2022).
- To analyze different purpose of mobility, like care work, household-related tasks and leisure time (Parnell et al. 2022).

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References

- Aguilera, Anne, Virginie Lethiais, Alain Rallet and Laurent Proulhac. 2016. Home-based telework in France: Characteristics, barriers and perspectives. *Transportation Research Part A: Policy and Practice* 92: 1–11.
- Allen, Tammy D., Timothy D. Golden and Kristen M. Shockley. 2015. How Effective Is Telecommuting? Assessing the Status of Our Scientific Findings. *Psychological science in the public interest : a journal of the American Psychological Society* 16(2): 40–68.
- Bergstad, Cecilia J., Amelie Gamble, Tommy Gärling, Olle Hagman, Merritt Polk, Dick Ettema, Margareta Friman and Lars E. Olsson. 2011. Subjective well-being related to satisfaction with daily travel. *Transportation* 38(1): 1–15.
- Boyne, George A. 2002. Public and Private Management: What's the Difference? *Journal of Management Studies* 39(1): 97–122.
- Brough, Paula, Carolyn Timms, Xi W. Chan, Amy Hawkes and Laura Rasmussen. 2020. Work–Life Balance: Definitions, Causes, and Consequences. Pp. 473–487 in *Handbook of Socioeconomic Determinants of Occupational Health*, edited by Töres Theorell. Cham: Springer International Publishing.
- Como, Rebecca and José Domene. 2023. An Overview of Work-Life Wellness for Teleworking Couples. *Canadian Journal of Career Development* 22(1): 63–68.
- Como, Rebecca, Laura Hambley and José Domene. 2021. An Exploration of Work-Life Wellness and Remote Work During and Beyond COVID-19. *Canadian Journal of Career Development* 20(1): 46–56.
- Cristaldi, Flavia. 2005. Commuting and Gender in Italy: A Methodological Issue. *The Professional Geographer* 57(2): 268–284.
- Edelmann, Noella, Judith Schossboeck and Valerie Albrecht. 2021. Remote Work in Public Sector Organisations: Employees' Experiences in a Pandemic Context. Pp. 408–415 in *DG.O2021: The 22nd Annual International Conference on Digital Government Research*, edited by . New York, NY, USA: ACM.
- Federal Statistical Office (FSO) and Federal Office for Spatial Development (ARE). 2023. Mobilitätsverhalten der Bevölkerung: Ergebnisse des Mikrozensus Mobilität und Verkehr 2021.
- Fischer, Caroline, Isabella Proeller, John Siegel and Nicolas Draths Schmidt. 2020. Virtuelle Teams und Homeoffice. Pp. 1–13 in *Handbuch Digitalisierung in Staat und Verwaltung*, edited by Tanja Klenk, Frank Nullmeier and Göttrik Wewer. Wiesbaden: Springer Fachmedien Wiesbaden.
- Giménez-Nadal, José I., José A. Molina and Jorge Velilla. 2020. Work time and well-being for workers at home: evidence from the American Time Use Survey. *International Journal of Manpower* 41(2): 184–206.
- Greenhaus, Jeffrey H. and Nicholas J. Beutell. 1985. Sources of Conflict Between Work and Family Roles. *Academy of Management Review* 10(1): 76–88.
- Haddad, Hebba, Glenn Lyons and Kiron Chatterjee. 2009. An examination of determinants influencing the desire for and frequency of part-day and whole-day homeworking. *Journal of Transport Geography* 17(2): 124–133.
- Krasilnikova, Nadezda and Meike Levin-Keitel. 2022. Telework as a Game-Changer for Sustainability? Transitions in Work, Workplace and Socio-Spatial Arrangements. *Sustainability* 14(11): 6765.
- Mann, Sandi and Lynn Holdsworth. 2003. The psychological impact of teleworking: stress, emotions and health. *New Technology, Work and Employment* 18(3): 196–211.
- Mokhtarian, Patricia L. and Ilan Salomon. 1997. Modeling the desire to telecommute: The importance of attitudinal factors in behavioral models. *Transportation Research Part A: Policy and Practice* 31(1): 35–50.
- Moser, Lukas, Kevin C. Andermatt and Yvonne Hegele. 2021. Home sweet Home? Erkenntnisse zu Homeoffice in den Zürcher Gemeindeverwaltungen während der Covid-19 Pandemie. *Swiss Yearbook of Administrative Sciences* 12(1): 98–119.
- Pabilonia, Sabrina W. and Victoria Vernon. 2022. Telework, Wages, and Time Use in the United States. *Review of economics of the household* 20(3): 687–734.
- Parnell, Katie J., Kiome A. Pope, Sophie Hart, Erinn Sturgess, Rachel Hayward, Pauline Leonard and Kirsten Madeira-Revell. 2022. 'It's a man's world': a gender-equitable scoping review of gender, transportation, and work. *Ergonomics* 65(11): 1537–1553.
- Polk, Merritt. 2004. The influence of gender on daily car use and on willingness to reduce car use in Sweden. *Journal of Transport Geography* 12(3): 185–195.
- Ravalet, Emmanuel and Patrick Rérat. 2019. Teleworking: Decreasing Mobility or Increasing Tolerance of Commuting Distances? *Built Environment* 45(4): 582–602.
- Rosenbloom, Sandra. 2006. Is the Driving Experience of Older Women Changing? *Transportation Research Record: Journal of the Transportation Research Board* 1956(1): 127–132.
- Russell, Helen, Philip J. O'Connell and Frances McGinnity. 2009. The Impact of Flexible Working Arrangements on Work-life Conflict and Work Pressure in Ireland. *Gender, Work & Organization* 16(1): 73–97.
- Schwanen, Tim, Martin Dijst and Frans M. Dieleman. 2002. A Microlevel Analysis of Residential Context and Travel Time. *Environment and Planning A: Economy and Space* 34(8): 1487–1507.
- Sirgy, M. J. and Dong-Jin Lee. 2016. Work-Life Balance: A Quality-of-Life Model. *Applied research in quality of life* 11(4): 1059–1082.
- Vance, Colin and Rich Iovanna. 2007. Gender and the Automobile. *Transportation Research Record: Journal of the Transportation Research Board* 2013(1): 54–61.
- Vayre, Émilie, Christine Morin-Messabel, Florence Cros, Anne-Sophie Maillot and Nelly Odin. 2022. Benefits and Risks of Teleworking from Home: The Teleworkers' Point of View. *Information* 13(11): 545.
- Viana Cerqueira, Eugênia and Benjamin Motte-Baumvol. 2022. Flexible work arrangements and household-related journeys. Who takes the lead in dual-earner heterosexual couples? *Travel Behaviour and Society* 26: 240–249.
- Zhang, Shihang, Rolf Moeckel, Ana T. Moreno, Bin Shuai and Jie Gao. 2020. A work-life conflict perspective on telework. *Transportation Research Part A: Policy and Practice* 141: 51–68.

Attitudes towards reason for teleworking

(1-4 Likert scale; 1 does not apply, 2 does not apply very much, 3 strongly agree, 4 fully agree)

Attribute	Total	Male		Female		Sig.
		no	yes	no	yes	
<i>Having children</i>						
Efficiency						
I can efficiently work on pending issues in between	3.5	3.2	3.5	3.7	3.7	.
I can do tasks that I normally can't do as well in the office	3.1	2.5	3.2	3.4	2.9	*
I appreciate the privacy there	3.5	3.3	3.4	3.7	3.5	
Autonomy						
I can organize my work there according to my needs	3.0	2.7	3.1	3.0	3.2	
I appreciate the autonomy in time and place	3.4	3.2	3.2	3.5	3.5	
I can do the work independently of place	3.3	3.1	3.7	3.2	3.1	
Coordination of paid work and life						
Teleworking saves time, since travel time is eliminated	3.4	3.3	3.4	3.6	3.4	
I am more satisfied with my work	2.5	1.9	2.5	2.7	2.4	
I am more motivated at work	2.4	1.7	2.6	2.5	2.3	.
I can better coordinate paid work and private life	3.0	2.6	2.8	3.0	3.3	
Teamwork and collaboration						
My colleagues or my team expect teleworking	1.1	1.5	1.1	1.1	1.0	**
I do teleworking out of habit	1.4	1.4	1.7	1.3	1.3	.

ANOVA

** = The difference is significant at the 0.01 level ($p < .01$, 2-sided).

* = The difference is significant at the 0.05 level ($p < .05$, 2-sided).

. = The difference is significant at the 0.10 level ($p < .10$, 2-sided).

n=124