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MANAGERIAL PREFERENCES TOWARDS EMPLOYEES WORKING FROM HOME: POST-PANDEMIC EXPERIMENTAL EVIDENCE

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Managerial Preferences towards Employees Working from Home: Post-Pandemic Experimental Evidence

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Abstract: Work from home (WFH) has been a part of the professional landscape for over two decades, yet it was the COVID-19 pandemic that has substantially increased its prevalence. The impact of WFH on careers is rather ambiguous, and a question remains open about how this effect is manifested in the current times considering the recent extensive and widespread use of WFH during the pandemic. In an attempt to answer these questions, this article investigates whether managerial preferences for promotion, salary increase and training allowance depend on employee engagement in WFH. We also explore the heterogeneity of the effects of WFH on careers across different populations by taking into account the employee's gender, parenthood status, frequency of WFH as well as the prevalence of WFH in the team. An online discrete choice experiment was run on a sample of over 1,000 managers from the United Kingdom. The experiment was conducted between July and December 2022, and thus after the extensive use of this working arrangement during the COVID-19 pandemic. The findings indicate that employees who WFH are less likely to be considered for promotion, salary increase and training than on-site workers. The pay and promotion penalties for WFH are particularly true for men (both fathers and non-fathers) and childless women, but not mothers. We also find that employees operating in teams with a higher prevalence of WFH do not experience negative career effects when working from home. The findings underline the importance of individual factors and familiarisation as well as social acceptance of flexible working arrangements in their impact on careers.

Keywords: career, experiment, family, gender, promotion, work from home

JEL codes: J12, J13, J16, J21

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1. INTRODUCTION

The incidence of work from home (WFH), broadly defined as conducting work from one's home rather than the employer's premise, has been steadily increasing over the last two decades thanks to the development of information communication technologies (ICTs) (Eurofound, 2022). The need for social isolation during the COVID-19 pandemic meant that WFH became a central element of professional life for many employees, and its prevalence has sharply increased. In 2019, just before the pandemic, the share of employees who WFH ('usually' or 'sometimes') in Europe was 11% (Eurostat, 2023). This number doubled when the pandemic started and approximately one in four European workers worked from home during that time. In the UK, where this study is situated, WFH was even more widespread and its prevalence exceeded 40% at the peak of the pandemic in 2021 (Eurostat, 2023). There is a prevailing argument that WFH will persist and become a standard practice in the professional realm as a considerable number of employees expresses an interest in continuing to WFH despite a decline in health risks associated with COVID-19 infections (Ozimek, 2020; Barrero et al., 2021; ONS, 2022). This is particularly pronounced among parents who perceive WFH as an opportunity to effectively combine paid employment with caregiving responsibilities (Thompson et al., 2022). Indeed, the data from the Office for National Statistics (ONS) shows that from January 2022 until February 2023, on average, 35% of employees in the UK indicated working from home at some point in the past seven days (ONS, 2023). Considering the increasing importance of WFH in the workplace, it is imperative to explore the potential ramifications that this mode of work may entail for workers' careers.

In this study, we explore whether managerial preferences for promotion, salary increase, and training allowance differ depending on the employees' engagement in WFH in the post-pandemic context of the UK. In particular, we examine whether WFH carries different career effects for women and men, taking into account their parenthood status and the prevalence of WFH in the team. Despite a sizeable volume of research exploring the link between WFH and career development (see for example Weeden, 2005; Heywood et al., 2007; Leslie et al., 2012; Bloom et al., 2015; Munsch, 2016; Chung and van der Lippe, 2020; Golden and Eddleston, 2020; Arntz et al., 2022), the impact of WFH on careers is still rather ambiguous.

On the one hand, WFH has the potential to boost workers' careers by increasing their productivity levels. This outcome arises due to several factors: reduction of workplace distractions and interruptions which are common in collocated office environments (Nardi

and Whittaker, 2002), the opportunity to allocate more time towards work instead of commuting (Arntz et al., 2022), and the consequential improvements in job satisfaction, job autonomy, and work-life balance (Gajendran and Harrison, 2007; Felstead and Henseke, 2017). Homebased workers were also found to work more intensely, which is possibly driven by their desire to reciprocate the opportunity to work remotely (Kelliher and Anderson, 2010). However, WFH can also lead to unfavourable career consequences as it significantly impairs social interactions and communication. Those who WFH may therefore experience less knowledge exchange with their co-workers and managers (Kurland and Bailey, 1999), mentoring and networking opportunities (Cooper and Kurland, 2002). They may also be at risk of worse job visibility due to the lack of their physical presence in the workplace (Srivastava, 2011; Maruyama and Tietze, 2012). The home environment may also not be free from distractions, as for example, other family members can interrupt the work of home-based workers, lowering their productivity levels (Demerouti et al., 2014). Additionally, employers may perceive workers who WFH as less or more productive than office-based workers due to the beliefs and attributions that they make regarding employees' motives for engaging in WFH, ultimately impacting the career opportunities of those who WFH (Leslie et al., 2012; Munsch, 2016; Bourdeau et al., 2019).

Several factors can moderate the impact of WFH on workers' careers, and one of them is the frequency of WFH. The experiences of individuals who engage in WFH more frequently are likely to be different than of those who WFH only sporadically. Indeed, a meta-analysis conducted by Gajendran and Harrison (2007) revealed that frequent WFH was associated with lower levels of job satisfaction and autonomy, and poorer co-worker relationship quality. Similarly, Martinez and Gomez (2013) showed that the more employees were engaging in remote work, the fewer opportunities for training and development they were receiving. A more recent study by Golden and Eddleston (2020) indicated that American remote workers experienced slower salary growth, with the most substantial negative impact observed among frequent users of WFH.

Furthermore, the influence of WFH on careers can vary depending on the worker's gender or parental status. It has been hypothesised that there are varying reasons why men and women engage in this mode of working, with men doing so to increase productivity and women in order to better combine paid work with caregiving (Sullivan and Lewis, 2001; Bailey and Kurland, 2002; Hilbrecht et al., 2008). Consequently, employers may consider women, and mothers in particular, to be less promotion-worthy because their engagement in WFH is driven by self-serving motives (e.g. work-family reconciliation) rather than organisation-serving motives (more intense work or longer working hours) (Leslie et al., 2012). Women who WFH can also be less productive as previous research showed that their work is often interrupted by children and implies a lot of multitasking while teleworking men are better at separating the work and family spheres (Powell and Craig, 2015). On the other hand, women may be rewarded for continuing to work for pay despite increased demand in the personal domain and be able to work longer hours when working from home due to the time saved on commuting (Arntz et al., 2022). Men who WFH may also face challenges due to high societal expectations of devoting themselves to work, making deviations from such norms particularly difficult for them and leading to adverse career consequences (Moss-Racusin et al., 2010; Coltrane et al., 2013; Rudman and Mescher, 2013; Vandello et al., 2013; Evertsson, 2016). As a result, gender and parenthood likely play a moderating role in the relationship between WFH and career outcomes, although the specific direction of this influence remains uncertain.

Finally, the impact of WFH on managerial decisions regarding promotion, salary and training may also depend on how common this arrangement is in the work environment. This is because the prevalence of WFH signals the degree of social acceptance and familiarity with it among managers. Previous research suggests that organisational settings, such as high-performance work culture and the financial implications related to the use of flexible work policies, exert a negative influence on the intentions of employees to participate in flexible work (Thebaud and Pedulla, 2022). Similarly, men's use of parental policies at work has been shown to heavily depend on the behaviour of other colleagues, particularly men (Dahl et al., 2014). Therefore, a higher prevalence of WFH within a group of close workers, indicative of higher social acceptance and familiarity with WFH, has the potential to mitigate the adverse career implications typically associated with this work arrangement.

Previous research examining the relationship between WFH and workers' career outcomes has produced inconsistent findings, with some indicating negative effects (Golden and Eddleston, 2020) and others suggesting positive effects (Weeden, 2005; Heywood et al., 2007; Arntz et al., 2022) of WFH on workers' opportunities for promotion or salary increases. However, these studies may be subject to sample selection issues as they rely on survey data. For example, if only the most productive and high-performing workers are granted greater flexibility, the positive influence of WFH on career outcomes may be overestimated (Glass and Noonan, 2016). Conversely, the negative effects of WFH may also be overestimated if individuals who request this working arrangement are less career-oriented. A few studies have employed experimental designs to mitigate selection bias (Bloom et al., 2015; Munsch, 2016; Fernandez-

Lozano et al., 2020) and they predominantly found detrimental effects of WFH on workers' career outcomes. These negative effects were stronger for parents than childless workers, but interestingly, they were attenuated for fathers who pursued WFH for childcare-related reasons (Munsch, 2014). However, it is important to note that these studies were conducted prior to the COVID-19 pandemic when WFH was much less prevalent and socially accepted.

There are several ways in which this article contributes to the literature. First, to the best of our knowledge, our study is the first post-pandemic study that provides evidence on the effects of WFH on managerial preferences and attitudes towards those engaging in this mode of working. The study, therefore, sheds light on how the impact of WFH on careers is manifested in the current times after the extensive and widespread use of WFH during the pandemic. The results of a survey conducted during the pandemic among home-based workers in the UK showed that 84% of them would like to continue working from home once the pandemic ends (ONS, 2022). This inclination among employees to continue remote work aligns with the recent data concerning the prevalence of home-based work in the UK during the late/post-pandemic period, which indicates that approximately 35% of employees reported engaging in working from home at least once within the past seven days between January 2022 and February 2023 (ONS, 2023). It can be stated then that WFH has attained a broader scope of adoption within the UK in comparison to the pre-pandemic period, and the circumstances captured in our survey (in the second half of 2022) closely resemble the post-Covid reality in the country. Besides providing evidence on the impact of WFH on workers' careers in the post-pandemic context, the study also contributes to the literature by providing causal evidence of the effects of WFH on workers' careers across different populations (i.e. based on worker's gender and parenthood status) and organisational settings (i.e. the prevalence of WFH in the team). Although a sizeable body of literature has explored the link between WFH and careers, many of the previous studies rely on survey data, which may suffer from sample selection problems, and the few experimental studies conducted on this topic rarely incorporate such a wide range of moderators (individual and group-level) of the impact of WFH on careers. Our approach thus allows us to not only account for the unobserved factors which may confound the relationship between WFH and careers but also to accurately distinguish how various groups of employees are perceived and judged differently when engaging in WFH.

Finally, our findings highlight the importance of organisational settings that either foster or hinder social acceptance and familiarisation of flexible working arrangements and ultimately impact the careers of those who engage in them.

2. MATERIALS AND METHODS

We investigate the effects of WFH on workers' career outcomes in the UK by using data from the discrete choice experiment which was pre-registered on the Open Science Framework. All deviations from the pre-registered plan and the study questionnaire are listed in Appendix. The study protocol was approved by the Ethics Committee of the University of Warsaw. The experiment was run online in the UK between July and December 2022 by an external research company. The participants were paid for participation in surveys in accordance with the rates indicated by the research company.

2.1 Study design

The study design involved a discrete choice experiment (i.e. a paired conjoint) with a forced answer. Participants were presented with three sets of worker profiles, with two profiles displayed side by side on each of the three pages (i.e. one page after another without the possibility to go back to the previous page). Each profile consisted of seven attributes (working mode, sex, number of children, age, work experience, skills ranking, and performance rating) that were randomly assigned to the profiles. The levels of the attributes are presented in Table 1. For half of the profile pairs, a randomisation process was employed to show the performance ratings, whereas, for the other pairs, the performance rating was intentionally withheld and marked as 'not provided'. After familiarising themselves with the pair of workers' profiles, participants were asked five questions, namely which employee they consider to be (4) more competent and (5) more committed to work. The study instructions and examples of workers' profiles presented to participants are shared in the Appendix. Once the participants compared three pairs of workers' profiles, they were asked a number of questions about themselves and their workplace, including questions on the prevalence of WFH in the company.

Table 1. The	list of	attributes	and	their	levels
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Attribute	Level
Sex	Female, Male

Number of children younger than 14 years old in the	0, 1, 3
household	
Age	38, 40, 41
Whether the employee works from home and the extent	none, 2 days per week, 5 days per
of it = working mode	week
Full-time work experience in the sector in years	8, 13
The ranking of skills (min 1 and max 5) possessed by	social 2 analytical 5, social 4
the employee	analytical 1, social 3 analytical 2
Employee's performance rank	not provided, satisfactory,
	exceptional

2.2. Sample

The study participants were recruited from an existing online opt-in panel and comprised of managers (i.e. individuals with supervisory responsibilities) based in the UK. The managers at the time of the survey were employed in occupations, in which the share of jobs that can be done at home is at least 50%, as per a study by Dingel and Neiman (2020). This sample restriction was used in order to avoid a situation in which a manager does not choose a person who WFH for promotion as working from home is not possible in this occupation. The managers worked in companies that employed at least 10 individuals and supervised at least 5 employees. The data is representative in terms of the size and geographical location of the company, as well as the managers' gender.

The overall number of participants for which the data has been collected amounted to 1,206. From the initial sample, we chose only individuals who met the selection criteria in terms of the time they allocated to complete the discrete choice experiment module of the survey. We established a cut-off threshold of 29 seconds, with sub-threshold time limits of less than 15 seconds for the first pair of profiles, less than 9 seconds for the second pair, and less than 5 seconds for the third pair. As a result of implementing this restriction, we excluded 269 respondents, resulting in a final sample size of 937 participants and a total of 5,622 data records (937 individuals * 3 * 2 profiles compared).

Our analysis primarily focuses on the subset of records in which the performance rank (profile attribute) was designated as 'not provided'. We contend that such a focus allows us to capture circumstances observed in the 'real world', where employers do not have information about the work performance of remote workers and office-based workers and have to make assumptions about it based on past experience or their own presumptions. This restriction does not alter the number of respondents, which remains at 937, but it does impact the number of records by approximately half (as the performance rating was randomly set to 'not provided' for half of the pairs of profiles). Consequently, our analysis encompasses 937 respondents evaluating 2,804 fictitious worker profiles (records).

The final sample comprises mostly individuals aged 35 and above, holding managerial positions and possessing higher educational qualifications. Additionally, they have at most two children. Within our sample, 38.5% are women, a proportion consistent with the observed percentage of female managers in 2019 LFS data (which is the latest available) for the United Kingdom (Eurostat, 2019). The sample is predominantly composed of IT specialists, accountants, and engineers, constituting 54% of all participants. The managers employed in the IT sector account for 23% of the sample, followed by the accounting and finance department, which constitutes 18.4% of the respondents. The participants assume decision-making responsibilities pertaining to employee promotions (69.7%), training (54.5%), evaluation (90.4%), and employment conditions such as remuneration and contract terms (55%). A significant majority of respondents (78%) indicated that they engage in remote work, at least sporadically. Furthermore, among those who work remotely, the majority (52%) do so in a hybrid manner, alternating between office attendance and working from home several times per week. The demographic characteristics of the respondents included in the analysis are shown in Table 2, while Table 3 presents features of the team and company they work in.

Variable	Mean	Std. Dev.	Variable	Mean	Std. Dev.
Age			Managerial responsibilities (=1 if yes)		
18-34	0.139	0.346	Promotion	0.697	0.460

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35-44	0.319	0.466	Training	0.545	0.498
45-54	0.279	0.449	Evaluation	0.904	0.295
55+	0.264	0.441	Employment conditions	0.550	0.498
Tenure (current position)			Occupation		
Less than 5 years	0.314	0.464	Network Manager	0.035	0.184
5-9 years	0.281	0.450	Software Developer or Computer Programmer	0.066	0.249
10-14 years	0.166	0.373	Systems Administrator	0.027	0.161
15-25 years	0.166	0.373	Other IT professional	0.172	0.377
More than 25 years	0.073	0.260	Accountant	0.118	0.323
Education			Financial or business analyst	0.038	0.192
Secondary or less	0.072	0.258	Investment or financial advisor	0.016	0.126
Further (college/6th form/A-levels)	0.170	0.376	Retail or personal banker/loan officer	0.016	0.126
Higher (undergraduate, postgraduate)	0.759	0.428	Other Finance professional	0.078	0.268
Sex (=1 if female)	0.385	0.487	Recruiter	0.011	0.103
Number of children			Other HR Professional	0.047	0.212
0 (no children)	0.335	0.472	Sales support / Account Manager	0.049	0.216
1 child	0.386	0.487	Artist, graphic artist, visual design specialist	0.012	0.108
2 children	0.210	0.408	Attorney or Lawyer	0.042	0.200
3 and more children	0.068	0.252	Engineer	0.126	0.332
WFH (=1 if yes)	0.782	0.413	Management Consultant	0.041	0.197
WFH frequency for those who W	VFH		Scientific researcher	0.017	0.130
Daily	0.265	0.441	Writer or journalist	0.012	0.108
Several times a week	0.523	0.500	Marketing and related disciplines	0.049	0.216
Several times a month	0.153	0.360	Other	0.0288	0.1674
Less often than st. a month	0.060	0.238			
Number of observations			937		

The participants predominantly work in companies engaged in financial and insurance activities, as well as the information and communications sector. This likely contributes to the significant proportion of employees within the respondents' teams who engage in remote work. Specifically, in approximately half of our sample (50.5%), over 80% of team members work from home at least occasionally. Conversely, in 16.2% of teams, no team member engages in remote work. Furthermore, around 23.8% of the companies represented in the survey are situated in London. Interestingly, despite the majority of companies being large organisations with over 1,000 employees (40.6%), the managers included in our sample primarily oversee relatively small teams of 5-9 individuals (45.8% on average).

Variable	Mean	Std. Dev.	Variable	Mean	Std. Dev.		
	Team						
Department Number of employees (team)							
Accounting / Finance	0.184	0.387	5-9	0.458	0.498		
Administration	0.013	0.113	10-19	0.322	0.468		
Business Analytics	0.019	0.137	20-49	0.154	0.361		
Customer Relations	0.011	0.103	50-99	0.042	0.200		
Engineering	0.100	0.301	>100	0.025	0.155		
HR	0.049	0.216	Share of employees who WFH				
IT	0.233	0.423	none	0.162	0.369		
Legal	0.037	0.190	<20%	0.112	0.316		
Management	0.100	0.301	20%-39%	0.086	0.281		
Marketing	0.036	0.187	40%-59%	0.064	0.245		
Operations	0.055	0.229	60%-79%	0.070	0.256		
Promotion / PR	0.010	0.098	>80%	0.505	0.500		
Research and development	0.037	0.190					
Sales	0.055	0.229					
Other	0.060	0.237					
			Company				
Region			Sector				
North East	0.029	0.167	Manufacturing	0.110	0.313		
North West	0.101	0.302	Electricity, Gas, Steam, and Air Conditioning Supply	0.021	0.145		

Table 3. Characteristics of respondents' team and company

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Yorkshire and the Humber	0.073	0.260	Water Supply; Sewerage, Waste Management	0.011	0.103
East Midlands	0.060	0.237	Construction	0.047	0.212
West Midlands	0.080	0.272	Wholesale and Retail Trade; Repair of motor vehicles	0.038	0.192
East of England	0.073	0.260	Transportation and Storage	0.031	0.173
London	0.238	0.426	Accommodation and Food Service Activities	0.013	0.113
South East	0.145	0.352	Information and Communication	0.142	0.349
South West	0.085	0.280	Financial and Insurance Activities	0.209	0.407
Wales	0.035	0.184	Real Estate Activities	0.013	0.113
Scotland	0.081	0.273	Professional, Scientific and Technical Activities	0.100	0.301
Company size			Administrative and Support Service Activities	0.012	0.108
10 to 19	0.091	0.287	Public Administration and Defence; Compulsory Social Security	0.033	0.179
20 to 34	0.114	0.318	Education	0.036	0.187
35 to 49	0.085	0.280	Human Health and Social Work Activities	0.031	0.173
50 to 99	0.052	0.223	Arts, Entertainment and Recreation	0.028	0.164
100 to 249	0.084	0.278	Other	0.125	0.331
250 to 499	0.084	0.278			
500 to 999	0.083	0.276			
> 1,000	0.406	0.491			
Number of observations			937		

2.3 Key variables

In this study, we explore the effect of WFH on career outcomes. We thus focus on three outcome variables, namely being chosen for (yes or no): (1) promotion, (2) salary increase and (3) training. Our main explanatory variable is the working mode (full-time; 5 days a week), which assumes one of the three categories: working fully on-site (working from the office five days a week), working in a hybrid mode (working two days from home, three days from the office) and fully from home (working from home 5 days a week). Further variables of interest include worker's sex (coded as women, or men) and parenthood status - number of children in the household (coded as parents, or non-parents). The group-level variable included in the study is the prevalence of WFH in the team measured by the question 'How many of the workers under

your supervision work from home at least one day a week on a regular basis?' with three categories: 0-39% (Low), 40-79% (Moderate) and 80+% (High). Remaining profile attributes, such as workers' age, work experience and skills are considered to be control variables in the models.

2.4 Data analysis

In our analysis, we employ a logistic regression with a separate model constructed for each of the three outcome variables. The estimated coefficients of the models are used to derive the predicted probabilities (i.e. estimated marginal means) of choosing an employee for promotion, salary raise and training. We use 83% confidence intervals (CIs) as it was demonstrated that nonoverlapping 83% CIs are sufficient to display statistically significant differences (at 0.05 level) between two probabilities in logistic regression (Austin & Hux, 2002).

First, we investigate the impact of WFH and its frequency (hybrid vs full-time home-based work) on workers' opportunities for promotion, salary increase, and training. Subsequently, we examine the potential moderating role of gender and parenthood status by interacting the working mode variable with these factors. Furthermore, we extend our analysis to explore the group-level factors that can influence the effect of WFH on career outcomes. To achieve this, we introduce an additional interaction term involving the prevalence of WFH in the team. This enables us to assess how the career effects of WFH may be contingent upon the level of WFH adoption, and subsequent familiarisation and social acceptance of this mode of working.

3. RESULTS

The data analysis results are presented graphically as predicted probabilities, with full regression tables shared in Appendix (Tables 1-3).

3.1 Managerial promotion preferences and WFH

First, we explore whether managerial preferences for promotion, salary increase, and training depend on employee engagement in WFH (Figure 1). We find that employees who work in the hybrid and fully home-based mode are less likely to be chosen for promotion and salary increase than those who work from the office. Those, who fully WFH, are also less likely to be chosen for training than office-based workers. Specific results show that those who work in the hybrid

mode (2 days at home, 3 days at the office) are 7.7% less likely to be chosen for promotion and 7.1% less likely to be chosen for a salary increase than office-based workers. Those who entirely work from home (5 days at the office) are 10.7% less likely to be chosen for promotion, 9.4% less likely to be chosen for a salary and 6.6% less likely to be chosen for training than those who work on-site. Importantly, there is no statistically significant difference in the chances of being chosen for promotion and salary increase between full-time and hybrid home-based workers though full-time homeworkers are significantly less likely to receive training than hybrid workers. Overall, our findings demonstrate that engaging in WFH carries negative career implications related to diminished chances for promotion, salary increase, and training.





Source: Own calculations based on collected data. **Notes to Figure 1**: Full estimation output is presented in Appendix Table 1. Confidence intervals represent 83%.

3.2 Moderating effect of the prevalence of WFH in the team

Furthermore, we explore the moderating role of the prevalence of WFH in the team on the impact of WFH on career outcomes (Figure 2). We find that individuals who WFH are less likely to be chosen for promotion and salary increase than those working from the office but

only when the prevalence of WFH in their team is lower, namely less than 80% (for promotion) or 40% (for salary increase) of the team members work from home at least one day a week. Clearly, in teams where WFH is common (>80% of workers make use of it), there are no differences in the chances for a promotion or salary increase with respect to the mode of work. Different findings are observed when it comes to training opportunities: here we observe that lower training opportunities are given to full-time home-based workers both when the prevalence of WFH in the team is low (less than 40% of workers use it) and high (more than 80% of workers use it).





Source: Own calculations based on collected data.

Notes to Figure 2: Full estimation output is presented in Appendix Table 2. Confidence intervals represent 83%. WFH prevalence is measured by the question '*How many of the workers under your supervision work from home at least one day a week on a regular basis?*', with Low WFH referring to 0-39%, Moderate WFH referring to 40-79%, and High WFH referring to more than 80%.

3.3 Moderating effects of gender and parenthood

In the next step, we run interaction models of WFH, gender and parenthood status to explore the moderating role of these variables in the effect of WFH on career progression. Our findings reveal that negative effects of WFH on careers exist for men, both fathers and non-fathers, and childless women. Fathers and childless men are less preferred for promotion and salary raises when working from home regardless of their frequency of WFH as both hybrid and fully homebased workers experience similar career consequences (with the exception of childless men who do not get penalised in regards to pay when working fully from home). Whereas, childless women are less likely to be chosen for promotion (but not salary raise) than on-site workers only when they work fully from home. For mothers, we observe no negative consequences of WFH for their promotion or pay, even if they work solely from home. When looking only at the group of fully home-based workers, mothers have higher chances of being preferred for promotion and salary raise than men, both childless men and fathers. Interestingly, in contrast to the first two outcome variables, we find that childless women and mothers who work fully from home are less likely to be chosen for training than on-site workers but we do not find such effects for men. Although, it is worth pointing out that the difference in being preferred for training between childless women working from home and those working on-site is marginally statistically significant. In sum, these findings suggest that men and childless women who WFH are less likely to be promoted and receive a pay raise than those working on-site, whereas, mothers working from home are less likely to receive training than on-site working mothers.

In addition, we run the above model in interaction with the prevalence of WFH in the team and we find that negative WFH effects for promotion and pay exist only in teams where the prevalence of WFH is low (i.e. less than 40% of workers WFH at least one day a week). This applies to all workers regardless of their gender or parenthood status (see Appendix Graphs 1-3 and Table 4).





Source: Own calculations based on collected data. **Notes to Figure 3**: Full estimation output is presented in Appendix Table 3. Confidence intervals represent 83%.

4. DISCUSSION

The phenomenon of WFH has witnessed a remarkable surge in popularity, emerging as a prevalent practice in numerous professional contexts (Ozimek, 2020; Barrero et al., 2021; ONS, 2023). This widespread adoption of WFH can be attributed to its perceived advantages, encompassing various beneficial aspects for both employees and employers. Employees stand to gain from the potential enhancement of work-life balance (Gajendran and Harrison, 2007; Felstead and Henseke, 2017; Chung and Van der Lippe, 2020; Laß and Wooden, 2022), increased flexibility (White et al., 2003), greater autonomy over their tasks (Kossek and Thompson, 2016), and time saved by eliminating the need for commuting (Vega et al., 2014). Employers, in turn, can reap advantages such as reduced expenses on physical office space and the potential for a more engaged and productive workforce (De Menezes and Kelliher, 2011; Glass and Noonan, 2012; Vega et al., 2014; Lott and Chung, 2016). Research conducted prior to the COVID-19 pandemic has yielded inconclusive findings regarding the impact of WFH on career outcomes. It is vital to note, however, that previous studies frequently relied on survey

data, which may be susceptible to endogeneity issues and sample selection bias, with subsequent over-estimation or under-estimation of the impact of WFH on careers (Leslie et al., 2012; Glass and Noonan, 2016; Lott and Chung, 2016; Arntz et al., 2022). Additionally, some of these studies focused on results obtained from a single organisation, rather than including the entire working population (Golden, 2007; Martinez and Gomez, 2013; Golden and Eddleston, 2020). Yet, prior research underscored that employer beliefs about why employees WFH and their levels of productivity while doing so are important for the impact of WFH on careers (Leslie et al., 2012).

In this study, we contribute to the existing literature by providing empirical evidence that establishes a causal link between WFH and career consequences, specifically in terms of promotional prospects, salary raise, and training opportunities. Our findings align with earlier experimental investigations conducted prior to the pandemic showing the detrimental impact of WFH on careers (Bloom et al., 2015; Munsch, 2016; Fernandez-Lozano et al., 2020). Thus, this means that the extensive experience with WFH during the COVID-19 pandemic, and the subsequent normalisation of this mode of working in the public sphere, has not (yet) altered the negative effects of WFH. However, contrary to previous research based on survey data (Martinez and Gomez, 2013; Golden and Eddleston, 2020), we find that the detrimental consequences of WFH on career outcomes are not contingent upon the frequency of remote work. Both individuals engaged in hybrid work arrangements (i.e. work 2 days at home and 3 days a week at the office) and those exclusively working from home (i.e. work from home 5 days a week) encounter comparable and diminished prospects for promotion and salary increases. The tendency of managers to exhibit a diminished preference for promoting workers who WFH can be attributed to several factors. One such factor pertains to the challenge faced by managers in accurately evaluating the productivity of employees who WFH, as they rely on assessing the output of their work rather than 'face time' which is easier to determine (Kossek and Thompson, 2016; Bourdeau et al., 2019). As a result, managers may exhibit a perceptual bias toward employees who engage in WFH (Chung, 2020). Moreover, the complexity and ambiguity inherent in coordinating, monitoring, and controlling processes within teleworking teams contribute to decreased operational efficiency, thereby diminishing managers' preference for promoting remote workers to higher-rank roles (Baruch, 2000; Van der Lippe and Lippenyi, 2020). Future research should aim at identifying and investigating the mechanisms behind the reduced propensity among managers to grant home-based or hybrid workers promotions, salary raise and training.

Furthermore, we provide evidence that the negative career consequences of WFH are gendered and depend on workers' parenthood status. Interestingly, we find no negative promotion or pay implications for mothers who WFH, which is true for those who work in both the hybrid mode and solely from home. Employees that experience lower promotion and salary raise prospects when working from home are men (both childless and parents) and childless women. One possible explanation for this finding is that employees engaging in WFH deviate from the stringent norm of an ideal worker who is fully devoted to work, often able to work long hours and puts work above other responsibilities and personal life (Williams et al., 2013; Cech and Blair-Loy, 2014). Breaking such norms can lead to the stigmatisation of employees and a negative perception of their work, job commitment or productivity (Williams et al., 2013). Considering that flexible working arrangements are commonly used by working parents as a means to effectively integrate their professional and personal lives, it can be argued that gender norms and beliefs play a role in shaping the occurrence and targets of flexibility stigma (Chung, 2020). In the case of this study, when mothers choose to WFH, they deviate from the expectations of the ideal worker, yet align with the prescriptive societal gender norms that women should prioritise family responsibilities over professional pursuits (Blair-Loy, 2003). Whereas, men who engage in WFH deviate from both workplace and societal gender norms, which can lead to unfavourable career outcomes (Thébaud and Pedulla, 2022). Indeed, previous studies have consistently demonstrated that men who assume caregiving responsibilities at the expense of work, such as taking parental leave or reducing their working hours, face more severe professional repercussions than women (Moss-Racusin et al., 2010; Coltrane et al., 2013; Rudman and Mescher, 2013; Vandello et al., 2013; Evertsson, 2016).

Another important explanation for the finding that childless women and men are more likely to experience negative career consequences for WFH than mothers may be that they are perceived as groups of workers that do not have an important reason to WFH, as compared to mothers who need to combine the increased demand in their personal life with paid work (Sullivan and Lewis, 2001; Powell and Craig, 2015; Chung and Van der Lippe, 2020). Therefore, employers may create negative presumptions about their productivity and commitment to work (Leslie et al., 2012; Munsch, 2016; Bourdeau et al., 2019). Within the context of the UK, combining paid work with childrearing is largely a woman's job as public support for working parents is still underdeveloped and mothers are seen as primary caregivers (Matysiak and Węziak-Białowolska, 2016). In this country there is also a strong and expanding right to request flexible working and such arrangements are most prevalent among working mothers (Wanrooy et al.,

2013; Chung and Van der Horst; 2018; Eurofound, 2020). This could indicate that, within the UK context, the use of flexible working arrangements may be perceived by managers as more acceptable (and justified) among mothers, as opposed to non-parents and fathers. The strong presence of ideal worker norms in the UK may further disadvantage men and childless women who deviate from them by engaging in flexible work, potentially signalling to their employers a lower commitment to work or productivity (Chung, 2020). Indeed, the fear of negative career consequences was stated as one of the most important reasons why workers do not take up flexible working arrangements in the UK (TUC, 2017; Chung, 2020). Considering that promotion and salary raise are seen as investments in employees (Gavino et al., 2012), men and childless women who decide to WFH may, therefore, be perceived in a negative light as less advancement-worthy employees.

Moreover, it may be reasonable for managers to anticipate that working mothers who engage in WFH will display increased commitment and exert greater effort as a means of reciprocating for the flexibility afforded to them (Kelliher and Anderson, 2010; Belmi and Pfeffer, 2015). The use of WFH by employees is often motivated by the desire (or need) to better integrate personal and professional spheres, particularly for individuals with childcare responsibilities (Sullivan and Lewis, 2001; Bailey and Kurland, 2002; Hilbrecht, et al., 2008; Chung and Van der Horst, 2018). For working mothers, the option to WFH may be perceived by managers as an important employee-related benefit allowing them to better reconcile work and family lives. Consequently, managers may hold the belief that mothers who WFH will exhibit increased commitment to work and productivity to reciprocate for this benefit. Previous research confirms that employees granted the opportunity to work flexibly are often willing to make sacrifices, such as altering the number of hours worked, even at the expense of their personal time or compensation (Golden, 2001). Additionally, Kelliher and Anderson (2010) find that employees engaged in remote work demonstrate increased effort and heightened commitment. Notably, as evidenced in this study, trading flexibility for increased effort was not openly discussed or negotiated with the employer, but it was rather entirely assumed by remote workers, which indicates a significant inner desire to reciprocate for this benefit. Prior research also suggests that some managers deliberately exercise their discretion in granting remote work with the aim of encouraging longer working hours and fostering greater commitment (Bathini and Kandathil, 2019). In sum, managers may presume that mothers who engage in WFH feel obliged to reciprocate for the privilege of WFH and anticipate that they will fulfil this obligation

by delivering additional effort that benefits the employer. As a result, mothers who WFH are not penalised for their participation in this working arrangement.

What is more, in alignment with previous research (Cooper and Kurland, 2002; Martinez and Gómez, 2013), our findings demonstrate that individuals who WFH receive comparatively less training allowance than on-site workers. However, when considering gender and parenthood, our results substantially diverge from the findings concerning promotion and pay outcome variables presented in this study. We observe that mothers who WFH are less preferred for training opportunities compared to on-site working mothers. Interestingly, these negative effects are not observed for men (results for childless women are marginally statistically significant), which stands in opposition with the findings obtained for promotion and pay raise. We interpret these findings by considering that although training can be seen as a discretionary resource (Shore and Shore, 1995; Gavino et al., 2012), managers from our study may have viewed it primarily as a means of employee 'improvement' rather than as a reward. Consequently, those who WFH and are already equally worthy of promotion and pay raise as office-based workers (i.e. mothers) do not need the additional training and development opportunities. In addition, managers may perceive mothers who WFH to be more committed to their work and work harder in order to reciprocate for being allowed to work flexibly (Kelliher and Anderson, 2010; Belmi and Pfeffer, 2015). Therefore, from the managers' perspective, mothers working from home may be seen as more productive and committed than on-site working mothers, which means that they do not experience negative WFH effects in relation to promotion and pay increases, and are less likely to be granted training as they do not require further improvement to their performance.

This study also explored whether the prevalence of WFH in the team moderates the negative effect of WFH on careers. We find that the higher the prevalence of WFH in the team, the less prominent the negative career consequences of WFH are. Ultimately, in teams where the share of employees who WFH at least occasionally on a regular basis is 80% or more, there are no differences in chances for promotion, pay and training with respect to the mode of working. This could be due to the fact that a higher prevalence of WFH in the team may indicate a wider social acceptance and familiarisation with this mode of working. Our results are consistent with previous research in the area (Coltrane et al., 2013; Albiston and O'Connor, 2016; Lott and Abendroth, 2020; Thébaud and Pedulla, 2022), indicating the importance of workplace settings in shaping the experience of employees who use flexible working arrangements. However, past research on this topic was often restricted to the level of the whole organisation

rather than the co-workers. Our research contributes to the literature by elucidating the influence of the immediate social group at work (i.e. the employee team) on the career outcomes of individuals who WFH.

In general, our findings indicate that WFH has detrimental effects on career outcomes in the post-pandemic era. However, it is plausible that these adverse consequences may attenuate over time as WFH becomes even more prevalent, socially acceptable, and employers develop effective mechanisms for managing and evaluating remote workers. Our research results have implications beyond the specific context of this study, as we demonstrate that the adverse effects of WFH on career outcomes are mitigated in settings where this mode of working is more prevalent. Given the substantial adoption of WFH in the UK compared to other countries, it is reasonable to anticipate a similar career penalty in countries with a lower prevalence of remote work.

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APPENDIX

A note shown to the participants before the study:

PAGE 1:

This survey is on the topic of employee evaluation, and the results will be used to inform our client. It is being conducted by the University of Warsaw in Poland.

Your answers will be confidential and entirely anonymous. There are no right or wrong

answers – all your answers are valuable and important to us, as they will allow us to learn about your preferences and opinions.

Your Account will be credited with 50 points for completing the survey.

We have tested the survey and found that, on average it takes around 15 minutes to complete.

This time may vary depending on factors such as your Internet connection speed and the answers you give.

Please click the forward button below to continue.

PAGE 2:

Imagine it's the time of an internal review process for the employees in your team. This is the period when promotions, training, salary raises, etc. are decided upon. We will now present you three pairs of workers' profiles, prepared by your HR department based on the in-company (between-workers) evaluation of skills and performance. For each pair of profiles, you will be asked to choose a worker to whom you would give a promotion, training, salary increase, etc. Due to budgeting limits, you can grant some of the benefits to only one of the workers in each pair. Please consider your choices carefully. After evaluating workers' profiles, we will also ask you some questions about yourself and your company. Once you go to the next page, you will not be able to go back.

An example of the pair of worker's profiles:

Please, familiarise yourself with the two profiles and answer the questions below.

	Worker A	Worker B
Performance rank (below satisfactory, satisfactory, exceptional)	not provided	not provided
Work experience in the sector (in full-time equivalent)	13 years	8 years
Family situation (number of children of age 14 and below)	0 children	3 children
Working mode (full time, 5 days a week)	3 days at office; 2 days at home	5 days at office
Sex	men	women
Skills rank (1 very weak, 5 very strong)	social 2, analytical 3	social 3, analytical 2
Age	40 years old	38 years old

Which employee would you give a promotion to?

Worker A	Worker B
Which employee would ye	ou give a salary increase to?
Worker A	Worker B
Which employee wo	uld you give training to

Which employee do you con	nsider to be more committed?
Worker A	Worker B
Which employee do you co	nsider to be more competent?
Worker A	Worker B

Deviations from the pre-registered plan:

Our study procedure and analysis plan were preregistered on the Open Science Framework (<u>https://osf.io/n2byz</u>). The following study pertains to the 'Component 1' section of the pre-registration.

In the pre-registration, we stated the following hypothesis:

H1: The HBW effect is stronger for women than men (Gender effect)

H2: The HBW effect is stronger among parents than non-parents (Parenthood effect)

H3: The parenthood effect is stronger for male than female employees (Fatherhood vs motherhood effect)

However, rather than analysing these effects in separate models (i.e. with the use of sub-groups) as previously indicated, we decided to run a triple interaction model in order to better account for the differences between these groups. In addition, we run all models only on the subsample of records where the performance rank was not revealed to the respondent (rather than in comparison with the subsample with known performance rank). We decided to focus on the subsample with unknown performance in the first step to display the effects of WFH which closely resemble the 'real life' situation where managers are not fully aware of the productivity levels of their employers and may have certain pre-assumptions about those who WFH. We will compare the performance effect (known vs. unknown performance) in a second step as a separate study in which we explore the role of the mechanisms behind the WFH effects observed in the 'real' world. Finally, the 'Component 1' section did not include information on the use of 'WFH prevalence' as a moderator in this study. This does not necessarily constitute a deviation from the original research plan as we stated that we may want to conduct exploratory analysis. However, we believe it is important to point out that the idea to use WFH prevalence as a moderator was created after the pre-registration.

Study questionnaire:

Participants first answered screening questions (sample restrictions are explained in the Data & Methods section). Then they were presented with information on the experiment and instructions (see p. 1 of the Appendix). Subsequently, they were tasked with selecting one employee from each pair for promotion, salary raise, training, and which employee they consider to be more competent and more committed to work. They then answered various questions about themselves and the company that they work within, which are presented in this section below.

Please, answer the following questions about the company that you work in.

Q200. Approximately how many people are employed by your company/employer in the country you live in?

<1> 1 (just me) <2> 2 <3> 3 to 5 <4> 6 to 9 <5> 10 to 19 <6> 20 to 34 <7> 35 to 49 <8> 50 to 99 <9> 100 to 249 <10> 250 to 499 <11> 500 to 999 <12> 1,000 or more

How many of the people employed in your company (in the country you live in) are women?

<1> less than 20% <2> 20-39% <3> 40-59% <4> 60-79% <5> 80% or more

Please, indicate which measures are provided in your company (Yes / No / Don't know):

<1> Support with childcare (e.g. company childcare facility, cooperation with childcare facilities, childcare during school holidays) or financial contributions towards childcare <2> Additional employer-funded childcare-related leave (e.g. maternity/paternity/parental, in case of child's sickness) or additional payment during a statutory leave

- <3> Flexible start and finish times
- <4> Working-time accounts
- <5> Option to work from home
- <6> Part-time work
- <7> No meetings / events organized after a certain time.

Highly successful workers in your company are those who...

<1> Work long hours

<2> Are available to work overtime hours whenever needed

<3> Frequently bring work home to finish uncompleted tasks

<4> Are available beyond working hours (for example, quickly replying to email, phone calls,

text messages outside of normal business hours)

<5> Put work above personal life

<6> Often do not take vacations

<7> Do not take time off for family reasons if work needs to be done

<8> Do not call in sick

<9> Often work from home during normal business hours

<10> Often work in the office beyond standard work hours

<11> Often choose to change work hours so that they are different from a standard 9 to 5 schedule

#Scale

- <1> Definitely not
- <2> Rather not
- <3> Rather yes
- <4> Definitely yes
- <9> Does not apply to my company

Which sector of the economy does your company operate in?

- <1> Agriculture, Forestry and Fishing
- <2> Mining and Quarrying
- <3> Manufacturing
- <4> Electricity, Gas, Steam and Air Conditioning Supply
- <5> Water Supply; Sewerage, Waste Management and Remediation Activities
- <6> Construction
- <7> Wholesale and Retail Trade; Repair Of Motor Vehicles and Motorcycles
- <8> Transportation and Storage
- <9> Accommodation and Food Service Activities
- <10> Information and Communication
- <11> Financial and Insurance Activities
- <12> Real Estate Activities
- <13> Professional, Scientific and Technical Activities
- <14> Administrative and Support Service Activities
- <15> Public Administration and Defence; Compulsory Social Security
- <16> Education
- <17> Human Health and Social Work Activities
- <18> Arts, Entertainment and Recreation
- <19> Other Service Activities (What?)
- <20> Activities Of Households As Employers; Undifferentiated Goods- and Services-

Producing Activities Of Households For Own Use

<21> Activities Of Extraterritorial Organisations and Bodies

Please, answer the following questions about yourself.

What department do you work in?

< 1 > IT<2> HR <3> Legal <4> Business Analytics <5> Customer Relations <6> Promotion / PR <7> Marketing <8> Sales <9> Accounting / Finance <10>Purchase <11> Operations <12> Logistics <13> Administration <14> Research and Development (R&D) <15> Management <16> Engineering <14> Other

How many years of work experience do you have (overall)?

<1> less than 10 years <2> 10-14 years <3> 15-19 years <4 > 20-25 years <5 > 25-29 <6> 30-34 <7> 35 or more

How many years of work experience do you have (current position)?

<1> less than 5 years <2> 5-9 years <3> 10-14 years <4> 15-19 years <5> 20-25 years <6> more than 25 years

How many people work under your supervision (approximately)?

<1> 5-9 < 2> 10-19 < 3> 20-49 < 4> 50-99 < 5> more than 100

Q6A. How many of them are female?

<1> less than 35%

<2> 35-65% <3> more than 65%

How many of them are part-time workers?

<1> less than 35% <2> 35-65% <3> more than 65% <4> no part-time workers

How many of the part-time workers are female?

<1> less than 35% <2> 35-65% <3> more than 65%

How many of the workers under your supervision work from home at least one day a week?

<1> none <2> less than 20% <3> 20%-39% <4> 40%-59% <5> 60%-79% <6> more than 80%

How many of the workers under your supervision work from home at least one day a week are female?

<1> less than 35% <2> 35-65% <3> more than 65%

How many of the workers under your supervision worked from home at least one day a week before the outbreak of the Covid pandemic?

<1> none <2> less than 20% <3> 20%-39% <4> 40%-59% <5> 60%-79% <6> more than 80%

Taking into consideration the tasks your employees perform at work, what is the maximum proportion of workers who would be able to do their work from home?

<1> none <2> less than 20% <3> 20%-39% <4> 40%-59% <5> 60%-79% <6> more than 80%

Do you think the proportion of workers who currently work from home in your company will eventually:

<1> Decline to the levels observed from before the COVID-19 pandemic <2> Decline but will be higher than before the COVID-19 pandemic <3> Will remain as it is now <4> Will increase

Do you currently work from home at least from time to time?

<1> Yes <2> No

How often do you currently work from home?

<1>Daily

- <2> Several times a week
- <3> Several times a month
- <4> Less often

What is the major reason for which you currently work from home?

- <1> Work-life balance / Family obligations
- <2> To finish/do extra work
- <3> Social distancing (due to Covid)
- <7> To save on commuting time
- <8> To be more productive
- <9> There is no office I could work at
- <4> Other (What?)

In your establishment, are you responsible for (Yes / No)?

- <1> promoting workers to higher positions
- <2> granting training allowances
- <3> employee evaluation
- <4> changes to employment conditions (e.g. pay increases, contract type)

Please, indicate how much you agree with the following statements.

- <1> Men should do as much housework and childcare as women.
- <2> A man's primary job is to earn money for the family, not to look after the children.
- <3> A woman's primary job is to look after the home and family.
- <4> All in all family life suffers when the mother has a full-time job.

#Scale <1> 1 Strongly disagree <2> 2 <3> 3

<4>4

<5> 5 Strongly agree

What is the highest level of your obtained education?

<1> primary

<2> secondary <3> further (college/6th form/A-levels) <4> higher (undergraduate, postgraduate)

How important, according to you, are social surveys for understanding social phenomena?

- <1> very important <2> rather important <3> neither important nor unimportant <4> rather not important
- <5> not important at all

Q15. How important are the following skills, in your opinion, for doing your job?

<1> Analytical <2> Social

#Scale <1> Not important <2> Weakly important <3> Moderately important <4> Important <5> Very important

Thank you for taking part in our survey. Respondents' demographics (data from panel):

- sex
- age
- region of the UK where they live
- industry of the company that they work for
- company size
- parenthood status

		WFH effect	
	PROMOTION	SALARY	TRAINING
	TROMOTION	INCREASE	TRAINING
VARIABLES	odds ratio	odds ratio	odds ratio
Working mode: Hybrid	0.706***	0.725***	0.994
	(0.070)	(0.071)	(0.098)
Working mode: Home	0.617***	0.656***	0.753***
	(0.063)	(0.066)	(0.072)
Sex: Women	1.600***	1.632***	1.147*
	(0.129)	(0.134)	(0.093)
Family situation: 1 child	1.073	1.040	0.996
	(0.106)	(0.103)	(0.096)
Family situation: 3 children	1.071	1.286***	0.986
	(0.105)	(0.124)	(0.092)
Age: 40 years old	1.101	1.010	0.893
	(0.111)	(0.102)	(0.088)
Age: 41 years old	1.146	1.017	1.000
	(0.114)	(0.099)	(0.099)
Work experience: 13 years	1.591***	1.477***	0.729***
	(0.129)	(0.120)	(0.059)
Skills: social 4, analytical 1	0.215***	0.207***	3.703***
	(0.023)	(0.021)	(0.383)
Skills: social 3, analytical 2	0.393***	0.384***	2.020***
	(0.039)	(0.038)	(0.194)
Constant	1.645***	1.709***	0.643***

Table 1. The odds ratio of being chosen for promotion, salary increase, and training by working mode: logit models.

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	(0.207)	(0.220)	(0.078)
Observations	2,804	2,804	2,804
*** p<0.01, ** p<0.05, * p<0.1			

	WFH effect		
	PROMOTION	SALARY	TRAINING
VARIABLES	odds ratio	odds ratio	odds ratio
Working mode: Hybrid	0.706***	0.725***	0.994
	(0.070)	(0.071)	(0.098)
Working mode: Home	0.617***	0.656***	0.753***
	(0.063)	(0.066)	(0.072)
WFH prevalence: Moderate	0.762	0.715**	0.791
	(0.130)	(0.119)	(0.127)
WFH prevalence: High	0.536***	0.651***	0.912
	(0.075)	(0.090)	(0.122)
Working mode: Hybrid # WFH prevalence: Moderate	1.301	1.249	1.528
	(0.375)	(0.351)	(0.438)
Working mode: Hybrid # WFH prevalence: High	2.326***	1.474	1.108
	(0.552)	(0.356)	(0.261)
Working mode: Home # WFH prevalence: Moderate	1.785*	2.217***	1.330
	(0.532)	(0.660)	(0.375)
Working mode: Home # WFH prevalence: High	2.892***	2.477***	1.180
	(0.712)	(0.599)	(0.274)
Sex: Women	1.606***	1.632***	1.148*
	(0.130)	(0.135)	(0.093)
Family situation: 1 child	1.089	1.054	1.000

Table 2. The odds ratio of being chosen promotion, salary increase, and training by the interaction of working mode and prevalence of WFH in the team: logit models.

	(0.108)	(0.104)	(0.097)
Family situation: 3 children	1.091	1.302***	0.982
	(0.108)	(0.127)	(0.092)
Age: 40 years old	1.117	1.026	0.897
	(0.114)	(0.104)	(0.088)
Age: 41 years old	1.147	1.013	0.999
	(0.114)	(0.098)	(0.099)
Work experience: 13 years	1.587***	1.477***	0.730***
	(0.129)	(0.121)	(0.059)
Skills: social 4, analytical 1	0.210***	0.203***	3.697***
	(0.023)	(0.021)	(0.383)
Skills: social 3, analytical 2	0.386***	0.380***	2.030***
	(0.039)	(0.038)	(0.195)
Constant	2.382***	2.274***	0.706**
	(0.382)	(0.371)	(0.108)
Observations	2,804	2,804	2,804
Notes: The prevalence of WFH in the team is measured by the question 'How many of the workers under			

your supervision work from home at least one day a week on a regular basis?' with answers coded into three levels <40% (Low WFH), 40-79% (Moderate WFH) and 80+% (High WFH). *** p<0.01, ** p<0.05, * p<0.1

	WFH, Gender & Parenthood effect		
	PROMOTIO	SALARY	TRAININ
	Ν	INCREASE	G
VARIABLES	odds ratio	odds ratio	
Working mode: Hybrid	0.534***	0.578**	1.081
	(0.121)	(0.133)	(0.241)
Working mode: Home	0.466***	0.663*	0.812
	(0.113)	(0.159)	(0.187)
Parenthood status: parents	0.903	1.073	0.942
	(0.171)	(0.208)	(0.180)
Working mode: Hybrid # Parents	1.264	1.096	1.255
	(0.359)	(0.321)	(0.362)
Working mode: Home # Parents	1.197	0.898	1.077
	(0.351)	(0.264)	(0.317)
Sex: Women	1.335	1.533*	1.458*
	(0.303)	(0.349)	(0.310)
Working mode: Hybrid # Women	1.208	0.972	0.731
	(0.396)	(0.322)	(0.237)
Working mode: Home # Women	1.251	0.925	0.795
	(0.425)	(0.311)	(0.261)
Working mode: Hybrid # Parents #			
Women	1.106	1.753	0.795
	(0.442)	(0.720)	(0.322)
Working mode: Home # Parents #			
Women	1.152	1.369	0.966
	(0.468)	(0.555)	(0.389)
Age: 40 years old	1.102	1.026	0.892
	(0.112)	(0.104)	(0.087)
Age: 41 years old	1.142	1.030	0.999
	(0.114)	(0.100)	(0.099)
Work experience: 13 years	1.593***	1.495***	0.725***
	(0.129)	(0.122)	(0.059)
Skills: social 4, analytical 1	0.215***	0.207***	3.736***
	(0.023)	(0.021)	(0.389)
Skills: social 3, analytical 2	0.393***	0.383***	2.029***
	(0.040)	(0.038)	(0.196)

Table 3. The odds ratio of being chosen for promotion, salary increase, and training by the interaction of working mode, gender and parenthood status: logit models.

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Constant	2.011***	1.898***	0.593***
	(0.342)	(0.336)	(0.098)
Observations	2,804	2,804	
*** p<0.01, ** p<0.05, * p<0.1	·		

Figure 1. The predicted probabilities for being chosen for promotion by the interaction of working mode, gender, parenthood status and the prevalence of WFH in the team: logit models.



Promotion

Source: Own calculations based on collected data.

Notes: The prevalence of WFH in the team is measured by the question 'How many of the workers under your supervision work from home at least one day a week on a regular basis?' with answers coded into three levels <40% (Low WFH), 40-79% (Moderate WFH) and 80+% (High WFH).

Figure 2. The predicted probabilities for being chosen for salary raise by the interaction of working mode, gender, parenthood status and the prevalence of WFH in the team: logit models.



Salary

Source: Own calculations based on collected data. **Notes:** The same as in Figure 1

Figure 3. The predicted probabilities for being chosen for training by the interaction of working mode, gender, parenthood status and the prevalence of WFH in the team: logit models.



Training

Source: Own calculations based on collected data. **Notes:** The same as in Figure 1

	WFH effect		
	PROMOTION	SALARY INCREASE	TRAINING
VARIABLES	odds ratio	odds ratio	odds ratio
Working mode: Hybrid	0.340**	0.670	0.539
	(0.149)	(0.297)	(0.226)
Working mode: Home	0.186***	0.345**	0.407**
	(0.088)	(0.155)	(0.181)
Parenthood status: Parents	0.672	1.001	0.614
	(0.248)	(0.362)	(0.221)
Working mode: Hybrid # Parents	1.080	0.643	3.399**
	(0.586)	(0.356)	(1.861)
Working mode: Home # Parents	1.914	1.270	2.602*
	(1.073)	(0.684)	(1.437)
Sex: Women	0.668	0.792	1.122
	(0.286)	(0.318)	(0.440)
Working mode: Hybrid # Women	1.638	0.855	1.365
	(1.017)	(0.523)	(0.848)
Working mode: Home # Women	1.946	1.024	2.099
	(1.414)	(0.708)	(1.357)
Parents # Women	1.619	1.352	2.478*
	(0.852)	(0.675)	(1.246)
Working mode: Hybrid # Parents # Women	0.999	2.209	0.211**

Table 4. The odds ratio of being chosen for promotion, salary increase, and training bythe interaction of working mode, gender and parenthood status: logit models.

	(0.737)	(1.671)	(0.162)
Working mode: Home #			
Parents # Women	0.571	0.697	0.196**
	(0.469)	(0.550)	(0.150)
WFH prevalence: Moderate	0.602	0.518	0.596
	(0.249)	(0.211)	(0.232)
WFH prevalence: High	0.262***	0.455**	0.820
	(0.093)	(0.160)	(0.267)
Working mode: Hybrid # WFH			
prevalence: Moderate	1.282	0.993	4.490**
	(0.821)	(0.639)	(2.889)
Working mode: Hybrid # WFH			
prevalence: High	2.573*	0.854	1.877
	(1.416)	(0.478)	(0.983)
Working mode: Home # WFH			
prevalence: Moderate	2.943	2.638	6.076***
	(2.171)	(1.888)	(4.135)
Working mode: Home # WFH			
prevalence: High	4.384**	2.592*	1.893
	(2.552)	(1.451)	(1.039)
Parents # WFH prevalence:			
Moderate	1.247	1.121	2.263
	(0.663)	(0.608)	(1.200)
Parents # WFH prevalence:			
High	1.848	1.186	1.659
	(0.855)	(0.548)	(0.755)
Working mode: Hybrid #			
Parents # WFH prevalence: Moderate	1.042	1.795	0.247*
	(0.839)	(1.485)	(0.207)

Working mode: Hybrid # Parents # WEH prevalence:			
High	1.159	1.917	0.276*
	(0.787)	(1.332)	(0.188)
Working mode: Home # Parents # WFH prevalence:			
Moderate	0.528	0.620	0.084***
	(0.464)	(0.533)	(0.072)
Working mode: Home # Parents # WFH prevalence:			
High	0.463	0.568	0.467
	(0.322)	(0.386)	(0.322)
Women # WFH prevalence:			
Moderate	1.459	2.121	1.498
	(0.903)	(1.286)	(0.861)
Women # WFH prevalence: High	3.851**	2.963**	1.483
	(2.137)	(1.587)	(0.752)
Working mode: Hybrid # Women # WFH prevalence:	0.591	1.005	0.102*
	0.381	1.003	0.198*
	(0.531)	(0.921)	(0.182)
Working mode: Hybrid # Women # WFH prevalence:	0.550	1.001	0.608
High	0.559	1.091	0.608
	(0.444)	(0.858)	(0.471)
Working mode: Home # Women # WFH prevalence:			
Moderate	0.671	1.023	0.166*
	(0.687)	(1.024)	(0.156)

Working mode: Home # Women # WEH prevalence:			
High	0.405	0.655	0.298
	(0.352)	(0.550)	(0.238)
Parents # Women # WFH prevalence: Moderate	0.783	0.700	0.254*
	(0.592)	(0.535)	(0.188)
Parents # Women # WFH prevalence: High	0.376	0.452	0.282**
	(0.250)	(0.291)	(0.181)
Working mode: Hybrid # Parents # Women # WFH	1.862	0.554	7 211*
	(2.070)	(0.644)	(8,414)
Woulring model Uklasid #	(2.079)	(0.044)	(0.414)
Parents # Women # WFH			
prevalence: High	1.115	0.975	5.763*
	(1.053)	(0.940)	(5.531)
Working mode: Home # Parents # Women # WFH prevalence: Moderate	1.426	1.323	20.837***
	(1.718)	(1 592)	(24.081)
Working mode: Home # Parents # Women # WFH	(1.710)	4.241	(21.001)
prevalence: High	4.327	4.341	6.966**
	(4.338)	(4.234)	(6.649)
Age: 40 years old	1.116	1.034	0.921
	(0.114)	(0.106)	(0.091)
Age: 41 years old	1.130	1.010	1.027
	(0.114)	(0.100)	(0.103)
Work experience: 13 years	1.588***	1.500***	0.721***

	(0.130)	(0.124)	(0.059)
Skills: social 4, analytical 1	0.208***	0.202***	3.779***
	(0.023)	(0.021)	(0.398)
Skills: social 3, analytical 2	0.377***	0.369***	2.050***
	(0.039)	(0.037)	(0.202)
Constant	4.262***	3.215***	0.710
	(1.242)	(0.919)	(0.192)
Observations	2,804	2,804	2,804
Notes : The same as in Table 2 *** p<0.01, ** p<0.05, * p<0.1			



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