

1 **The COVID-19 crisis and telework:**  
2 **A research survey on experiences,**  
3 **expectations and hopes**

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**Abstract**

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While a considerable number of employees across the globe are being forced to work from home due to the COVID-19 crisis, it is a guessing game as to how they are experiencing this current surge in telework. Therefore, we examined employee perceptions of telework on various life and career aspects, distinguishing between typical and extended telework during the COVID-19 crisis. To this end, we conducted a state-of-the-art web survey among Flemish employees. Notwithstanding this exceptional time of sudden, obligatory and high-intensity telework, our respondents mainly attribute positive characteristics to telework, such as increased efficiency and a lower risk of burnout. The results also suggest that the overwhelming majority of the surveyed employees believe that telework (85%) and digital conferencing (81%) are here to stay. In contrast, some fear that telework diminishes their promotion opportunities and weakens ties with their colleagues and employer.

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**Keywords:** COVID-19; telework; videoconferencing; career.

## 20 **1. Introduction**

21 In the popular media, there have been many references to the potentially disruptive  
22 medium- and long-term impacts of the COVID-19 crisis on the careers of citizens from  
23 Organization for Economic Cooperation and Development (OECD) countries [e.g. 1-5]. In this  
24 respect, there is the fear that an economic crisis, as a consequence of the current health  
25 crisis, will serve as an intermediary factor [6-9]. It is expected that this economic crisis will  
26 have predominantly negative effects, such as declining economic growth, disintegrating  
27 supply chains and deteriorating employment prospects [9-14]. Nonetheless, opportunities  
28 may also arise. For instance, the upcoming crisis could allow for the emergence of a greener  
29 economy or promote a boost in online communication and its supporting technologies [15-  
30 18]. Along with flourishing online communication (technologies), some have also suggested  
31 that COVID-19 could be the basis for a breakthrough in telework [19-20].

32 Telework is not a recent phenomenon: half a century ago employees already performed  
33 telework [21]. Because of inventions like the World Wide Web and increasingly powerful  
34 and affordable personal computers, a breakthrough in telework was forecasted, but it failed  
35 to materialise [22-23]. In 2009, only 7.5% of employees in the EU-27 occasionally performed  
36 telework [24]. In the next ten years, this proportion slowly increased to a mere 11% in 2019  
37 [24]. After the COVID-19 outbreak, a considerable number of employees across the globe  
38 were forced to work from home. In the European Union, this proportion amounted to  
39 almost two fifths [25]. A slightly higher proportion was even witnessed in Belgium with more  
40 than half of the employees working from home [25]. According to popular media, increased  
41 telework is here to stay, even when COVID-19 would be under control.

42 However, it is unclear whether this belief in a structural breakthrough in telework exists  
43 only in the minds of journalists because of the limited or asymmetrical information they  
44 have access to, or whether it is shared by a wider proportion of the working population. In  
45 response to this, we investigate, in the current study, (i) to what extent the COVID-19 crisis  
46 has impacted employees' personal views on telework and digital meetings (RQ3a) and (ii)  
47 whether these perceptions vary by sociodemographic or job characteristics (RQ3b). In  
48 addition, it is unclear at present (i) to what extent the broader population relates the  
49 current, sudden and obligatory increase in high-intensity telework because of COVID-19 to

50 (un)beneficial outcomes in various life and career outcomes (RQ2a) and (ii) whether these  
51 perceptions vary by sociodemographic or job characteristics, too (RQ2b). To better interpret  
52 the answers to RQ2a and RQ2b, we also surveyed the participants on how they perceived  
53 the impact of telework in general (not in COVID-19 times) on other career aspects (RQ1a).  
54 The answers to these questions serve as our baseline for the interpretation of the findings  
55 related to RQ2a. Finally, we investigated, once again, whether these perceptions in non-  
56 COVID-19 times varied by sociodemographic or job characteristics (RQ1b).

57 Research question 1a (RQ1a): How do employees perceive the impact of telework, in  
58 general, on other career aspects?

59 Research question 1b (RQ1b): Are these perceptions heterogeneous by  
60 sociodemographic and job characteristics?

61 Research question 2a (RQ2a): How do employees perceive the impact of extended  
62 telework during the COVID-19 crisis on various life and career aspects?

63 Research question 2b (RQ2b): Are these perceptions heterogeneous by  
64 sociodemographic and job characteristics?

65 Research question 3a (RQ3a): To what extent has the COVID-19 crisis impacted  
66 employees' personal views on telework and digital meetings?

67 Research question 3b (RQ3b): Are these perceptions heterogeneous by  
68 sociodemographic and job characteristics?

69 The contribution of the answers to the aforementioned research questions to both  
70 science and society is evident. From a societal viewpoint, policymakers, at the time, required  
71 immediate insights on how the working population was experiencing changes in their work  
72 situation. The first wave of mandatory telework in Belgium started on 18 March 2020 (until  
73 3 May 2020), while our analyses were based on data collected between 25 March 2020 and  
74 31 March 2020. A public report with preliminary findings of our survey was disclosed in April  
75 of that year. From a scientific point of view, the relevance of our research is threefold. First,  
76 the epidemic crisis has made researchers raise questions on how the COVID-19 telework  
77 policies affect employee attitudes, behaviours and productivity (amongst others) [26]. We  
78 wanted to add to this discussion by surveying changes of extended telework on personal  
79 views and life and career outcomes. Second, there is unanimity among researchers that

80 telework in the COVID-19 context systematically differs from telework in normal times so  
81 that the existing knowledge on telework cannot be blindly adopted in the current context  
82 [27-29]. More specifically, it is characterised by compulsory, high-intensity telecommuting  
83 that has known a very abrupt onset [27]. Therefore, more research is needed on this  
84 epidemic-induced form of telework [see 28]. Third, by taking into account a broad set of  
85 items to construct our baseline in the context of RQ1a (see 2.1. Main items) and a broad set  
86 of personal and job characteristics regarding RQ1b (see 2.2. Survey construction), we can  
87 make a relevant contribution to the existing literature on telework. More concretely, we add  
88 to the relationship between burnout and telework and the variability of outcomes related  
89 to telework by the respondents' migration background. Sardeshmukh, Sharma, and Golden  
90 [30], for example, noted that burnout research has often focused on traditional workers,  
91 but that studies have been slow to extend their interest to teleworkers. Van Steenbergen,  
92 van der Ven, Peeters, and Taris [31] state that few studies have examined the relationship  
93 between new ways of working and more distal employee outcomes such as burnout. Our  
94 study helps with enriching the research on this topic by disclosing the perceptions of  
95 employees on burnout prevention through telework. The link between telework and  
96 migration background is relevant as well since respondents with a migration background  
97 have a higher chance of being confronted with discrimination [32-33] and their experiences  
98 with telework might be different because this working environment is characterised by less  
99 physical and personal interaction [34].

100 The epidemic-induced telework has nourished the interest of many researchers. A  
101 considerable number of papers have appeared on the topic of telework in the COVID-19  
102 context, including non-empirical [e.g. 26] and empirical works based on both qualitative [e.g.  
103 35-36] and quantitative methods [e.g. 27-29, 37-48]. Empirical papers that employ  
104 quantitative research in the context of telework and COVID-19 can differ substantially. First,  
105 some researchers were able to collect data immediately after telework became mandatory,  
106 while others were not [e.g. 47]. The timing of data collection is important as employees'  
107 attitudes towards telework (in COVID-19 times) can differ over time: employees need time  
108 to adapt to the situation [27-28]. Second, some studies focus on a specific target group like  
109 the educational sector instead of maintaining a broad focus concerning the target group  
110 [e.g. 41]. Third, some studies focus on a specific subtopic, for example, gender differences  
111 [e.g. 38-39, 44] or health implications [42]. For our research, we decided to collect data (i)

112 immediately after telework became obliged, (ii) on a broad range of topics (iii) from a variety  
113 of different employees, to acquire an overall picture of this new concept of epidemic-  
114 induced telework. The ability to assess heterogeneity in the findings, thanks to a broad set  
115 of personal and job characteristics, discerns our research from other quantitative researches  
116 on telework in the COVID-19 context. Most studies only look at differences based on a small  
117 selection of variables and/or a limited number of sociodemographic characteristics (e.g.  
118 gender and age), which the researchers themselves often raise as a limitation in their work  
119 [37,40]. For example, differences in experiences and attitudes of the epidemic-induced  
120 telework based on migration background or current health situation (i.e. recently or  
121 currently infected by COVID-19) is relevant and, as far as we know, not taken into account  
122 in other studies that focus on telework and COVID-19.

123 To summarize, by answering the aforementioned research questions, we not only  
124 contribute to the scientific literature on the (expected) socioeconomic consequences of the  
125 COVID-19 crisis [e.g. 6, 8, 49-50] but also to the scientific literature on telework and, more  
126 specifically, (i) the evaluation of telework by employees and (ii) the (objective and perceived)  
127 career consequences of telework [e.g. 23, 30, 51-54]. We present data on these issues  
128 gathered from a panel of Flemish employees, representative with respect to age, gender  
129 and education level. The next chapter provides more detail on the data.

## 130 **2. Data**

### 131 **2.1. Main items**

132 We analysed the responses of a sample of Flemish employees (see 2.3. Sampling) as part of  
133 a broader COVID-19-related survey (for analysis of the other parts of this survey, we refer  
134 the reader to Lippens and colleagues [50]). In the context of the present study, three sets of  
135 items were submitted to the respondents; a complete list of item labels and statements can  
136 be found in Appendix A.

137 First, for RQ1a and RQ1b, all respondents (i.e. both active employees with the ability to  
138 telework (see 2.3. Sampling) and employees who were temporarily unemployed at the time

139 of data collection with the ability to telework (see 2.3. Sampling) were asked to evaluate  
140 telework and its associated (perceived) career consequences in general, independent of  
141 how the COVID-19 crisis affected their current telework arrangements. Each of the ten items  
142 concerning general career consequences of telework featured in our survey was derived  
143 from meta-analyses or reviews on the consequences of telework [23, 53-54]. More  
144 concretely, the items related to the following, frequently occurring themes in the telework  
145 literature: social isolation (item 'my relationship with my colleagues'); professional isolation  
146 ('my chances of promotion' and 'my professional development'); performance ('my  
147 efficiency in performing tasks' and 'my concentration during work'); work-life balance ('my  
148 work-life balance'); organisational attitudes ('my overall satisfaction with my job' and 'my  
149 feeling of connectedness with my employer'); and other consequences of telework related  
150 to well-being ('minimising my work-related stress' and 'minimising my chances of burnout').  
151 This resulted in a combined list of both proximal outcomes (work-life balance and  
152 relationship with colleagues) and distal outcomes of telework (the remaining items), in line  
153 with the framework of Gajendran and Harrison [23]. The panel members were asked to  
154 evaluate these items on a five-point Likert scale, ranging from 'a certainly negative effect'  
155 (1) to 'a certainly positive effect' (5).

156 Second, relating to RQ2a and RQ2b, active employees (i.e. not temporarily  
157 unemployed), who were confronted with extended telework due to the COVID-19 crisis at  
158 the moment of the survey, were asked to evaluate statements regarding this situation of  
159 extended telework on a five-point Likert scale, ranging from 'completely disagree' (1) to  
160 'completely agree' (5). We started by querying the respondents about their general  
161 satisfaction with the extended telework arrangement. Then, we surveyed them regarding  
162 the potential negative side effects due to extended telework because of the COVID-19 crisis:  
163 (i) family or professional conflicts, (ii) disturbances by roommates, and (iii) difficulties in  
164 combining different means of communication. As extended telework blurs the boundaries  
165 between work and family roles [23, 53], we would expect more conflicts and disturbances  
166 involving housemates, especially among those employees who are inexperienced  
167 teleworkers. According to Gajendran and Harrison [23], the beneficial impact of telework on  
168 work-family conflict and role stress largely depends on the learning curve associated with  
169 telecommuting, with more experienced teleworkers associating it with having an increased  
170 beneficial impact. Next, guidance from the employer—a critical condition for successful

171 telework [52]—and the ease with which employees convinced their employer to offer  
172 telework arrangements in this exceptional situation of sudden and high-intensity telework  
173 were evaluated. Finally, we included items on task efficiency, commitment, work-life  
174 balance, relationship with colleagues, stress management, burnout prevention and work  
175 concentration.

176 A third and final set of items included for answering RQ3a and RQ3b dealt with the  
177 extent to which the COVID-19 crisis had changed the respondents' views on telework and  
178 digital conferencing, and whether they believed that the level of telework and digital  
179 conferencing would be permanently increased as a result of this crisis. Our entire study  
180 sample (see 2.3. Sampling) was asked whether (i) their personal view on telework had  
181 become more positive as a consequence of the current crisis, (ii) whether they hoped to  
182 perform more telework in the future, and (iii) whether they believed telework would  
183 increase in prevalence in the future. The respondents also received similar questions about  
184 digital meetings. Said items were evaluated on a five-point Likert scale, ranging from  
185 'completely disagree' (1) to 'completely agree' (5).

## 186 **2.2. Survey construction**

187 The overall survey construction was grounded in the seminal surveying handbooks of  
188 Bethlehem and Biffignandi [55], Fowler [56] and Tourangeau, Conrad, and Couper [57]. The  
189 following paragraphs illustrate the important decisions we made to optimise the reliability  
190 and validity of the instrument. See Lippens and colleagues [50] for a more thorough  
191 discussion of these concerns and the institutional setting surrounding the survey.

192 First, non-differentiation (participants responding randomly, simply out of fatigue [55])  
193 was counteracted by presenting a limited number of items at a time and by using  
194 comprehensible wording (e.g. no double-barrelled constructions [58-59]). In addition,  
195 following the advice of Weijters, Cabooter, and Schillewaert [60], the items were scored  
196 using fully-labelled five-point Likert scales. To stimulate high-quality responses, we  
197 deliberately excluded the option 'I do not know' from the scales [55].

198 Second, next to conscientious item development, the data quality and survey  
199 completion rates were enhanced by introducing raffle prizes and displaying a progress

200 indicator, respectively [57, 61].

201 Third, adhering to the standards of first-rate surveying practices, the measuring  
202 instrument underwent pilot testing amongst 55 respondents. Throughout the pilot testing,  
203 the respondents were structurally questioned on (i) the clarity of expectations, (ii) the  
204 wording and (iii) topics that had potentially been neglected. Any issues detected during this  
205 pilot test were promptly resolved before sending out the survey.

206 Last, upon completing the data collection, data cleaning and sensitivity analyses were  
207 executed to further augment the quality of the response sets. The results remained robust  
208 after performing said analyses. Specifically, inattentive participants who failed to correctly  
209 answer a ‘trap’ question were not included in our basic sample (see 2.3. Sampling). Also,  
210 those participants with very short completion times (i.e. within 5% of the shortest survey  
211 duration) were removed from the final panel in the robustness analyses.

212 To answer RQ1b, RQ2b and RQ3b, we also used all of the data from the part of the  
213 broader survey that addressed the sociodemographic and job characteristics of the  
214 respondents. This enabled us to assess the heterogeneity concerning the respondents’  
215 gender, age, migration background, education level, relationship status, number of resident  
216 children and other (extended) family members, province, degree of urbanisation of their  
217 residence, and health status (before the COVID-19 crisis, overall current status and having  
218 been infected by COVID-19), as well as their type of employment contract, the part-time  
219 (versus full-time) nature of this contract, their tenure (with the current employer and in the  
220 current job), their level of job satisfaction, four key characteristics relating to the design of  
221 their job (i.e. autonomy, dependency on others, interaction outside of the organisation and  
222 feedback from others), and their sector of employment in detail.

### 223 **2.3. Sampling**

224 Ideally, the representativeness of our study sample would have been established using  
225 probability sampling, where all participants completed the survey—the latter being a  
226 condition that is often neglected [55-57]. However, practical constraints, such as the  
227 requirement for sampling through national registers, after ethical approval and follow-up by  
228 the registry office in cases of the non-response of participants, made us conclude that



229 probability sampling was neither feasible nor desirable. Given the surging rates of telework  
230 and temporary unemployment, the scientific community and policymakers required  
231 immediate insights into how the working population was experiencing changes in their work  
232 situations.

233 The data collection of our study, which was based on web surveying, had several  
234 advantages. Compared to other methods (such as physical and telephonic interviews), web  
235 surveying allows data to be collected from a large sample. Here, 14,005 individuals filled in  
236 the survey. Finally, in our case, the sampling was presumably not hampered by a common  
237 limitation of web surveys—namely, an under-coverage of the studied population—through  
238 the exclusion of individuals not connected to the internet, in the sense that the teleworkers  
239 in our survey, by default, had internet access.

240 However, a substantial threat to the representativeness of our sample—as with nearly  
241 all web surveys—was self-selection (i.e. respondents themselves choosing whether they  
242 answer a call to participate or not). More concretely, self-selection is a peril to the  
243 representativeness of a sample when respondents differ systematically from non-  
244 responders in terms of the surveyed variables. To mitigate this threat, we applied a post-  
245 stratification strategy, as recommended by Bethlehem and Biffignandi [55] and Tourangeau  
246 and colleagues [57]. That is, we wanted our sample to be representative by (i) gender, (ii)  
247 age and (iii) education level based on the population of Flemish employees under the age of  
248 65 years. Specifically, we aimed for the representativeness of this population using eight  
249 cells ('strata'), combining two levels of each of the auxiliary variables: males versus females;  
250 tertiary education versus no tertiary education; and being at least 50 years old or being  
251 younger. Therefore, we identified the stratum, in the total sample of 14,005 respondents,  
252 that was most underrepresented when compared to the 2019 population averages for  
253 Flemish employees under 65 years, which was female workers without tertiary education  
254 aged 50 years or older. All complete responses (with correct answers to our 'trap' question;  
255 see above) from this stratum were included in the basic sample for this stratum. For the  
256 other seven strata, respondents were randomly drawn based on their proportions in the  
257 population. Applying this post-stratification resulted in a basic sample of 3,821 individuals.  
258 In such a post-stratification strategy, the total number of complete responses used for the  
259 analyses depends on the number of responses in the most underrepresented stratum.

260 Although this post-stratification has the disadvantage of only using a subset of the original  
261 sample, it allowed us to perform our analyses on a sample that is representative by gender,  
262 age and educational level.

263 From this basic sample, we eventually excluded respondents whose jobs did not allow  
264 for telework. More concretely, respondents who indicated that less than 10% of their work  
265 could potentially be done via telework were removed from the panel, which resulted in a  
266 study sample of 2,673 participants. Moreover, the items related to RQ2a and RQ2b (see 2.1.  
267 Main items) were only submitted to individuals experiencing extended telework due to the  
268 COVID-19 crisis at the moment of the survey. This subsample comprised 1,895 individuals.  
269 Fig. 1 summarises the sampling framework.

270 <Fig. 1 about here>

## 271 **2.4. Summary statistics**

272 Table 1 contains the summary statistics concerning the personal and job characteristics of  
273 our study sample, and our subsample of individuals with extended telework resulting from  
274 the COVID-19 crisis. The scales we used are referred to in the notes of Table 1.  
275 Unsurprisingly, in the subsample of individuals who experienced extended telework certain  
276 personal characteristics are represented more compared to the full study sample (e.g. highly  
277 educated individuals are represented more as they are presumably more likely to  
278 telecommute; see [51]). The same applies to the representation of certain sectors (e.g. the  
279 educational sector is represented more, while logistics & transport and technology, for  
280 example, are sectors that are represented less compared to the full study sample).

281 <Table 1 about here>

## 282 **3. Results**

### 283 **3.1. General findings**

284 **3.1.1. Perceived impact of telework in general on various career aspects**

285 Fig. 2 provides an overview of the panel’s responses to the survey items relating to RQ1a.  
286 As can be seen in this figure, most panel members believe that telework has a strong positive  
287 effect in general. Almost two-thirds (65.7%) indicate that their overall satisfaction with their  
288 job increases with telework. Similarly, 64.6% think that telework improves their work-life  
289 balance, whilst about half of the respondents believe that telework helps to minimise both  
290 work-related stress (48.4%) and the chance of burnout (47.6%). The effects of telework on  
291 performance are also positively evaluated, with about half of the respondents asserting that  
292 telework (i) improves their efficiency in performing tasks (56.3%) and (ii) increases their  
293 work concentration (50.7%). These positive effects of telework on job satisfaction, work-life  
294 balance, role stress, burnout and performance are in line with the findings of previous  
295 studies [23, 53-54].

296 **<Fig. 2 about here>**

297 Even though telework is mostly thought of positively, there are some downsides in the  
298 context of career development, future prospects and the social aspects of not working in a  
299 regular office. Most notably, about a quarter of the panel members believe that telework  
300 decreases their chance of promotion (27.0%) and hampers their professional development  
301 (29.4%). Additionally, more than half of the respondents think that telework harms their  
302 relationships with their colleagues (57.5%), while the sense of connectedness with their  
303 employer is lowered according to about half (47.4%) of the panel members. Again, these  
304 findings are in line with previous research. Charalampous and colleagues [53] noted that an  
305 increase in telework can isolate employees, both socially and professionally. In addition,  
306 Redman and colleagues [54] found that telework can reduce the support employees receive  
307 from their employer in their personal and professional development. This is also reminiscent  
308 of the relationship that Moens and colleagues [62] previously established between  
309 temporary contracts and loneliness at work.

310 Table 2 summarises the results of our descriptive analyses and linear regression  
311 analyses. Here, the responses are classified according to the personal and job characteristics  
312 surveyed, which will be discussed in subchapter 3.2. (in light of RQ1b). We performed linear  
313 regression analyses in which the standard errors were corrected for heteroscedasticity

314 (White correction). Ordered logistic models and dummy specifications for the continuous  
315 explanatory variables included in the regression models lead to the same insights. A  
316 complete overview of the numerical regression results for the first item (i.e. perceived  
317 positive impact of telework on overall job satisfaction) is exemplified in Table B1 in Appendix  
318 B.

319 <Table 2 about here>

### 320 **3.1.2. Perceived impact of extended telework during the COVID-19 crisis** 321 **on various life and career aspects**

322 Fig. 3 illustrates that a large majority of our subsample with extended telework is satisfied  
323 with the increase in telework (65.9%). This result is not surprising, given three  
324 complementary observations. First, notwithstanding the sudden onset of the COVID-19  
325 crisis that forced employers to rapidly transition to telework without being able to prepare,  
326 more than half of the subsample feels well guided by their employer (53.2%), which is a  
327 critical condition for successful telework [52]. Second, the idea that the extended telework  
328 is beneficial for stress and burnout prevention, and on-the-job concentration holds for  
329 almost half of the employees with extended telework (45.7% reportedly experience less  
330 work-related stress, 44.7% note that they can concentrate better on their work and 42.7%  
331 believe the extended telework decreases their chances of burnout in the near future). In  
332 addition, more than half (55.7%) feel that extended telework has a positive effect on their  
333 work-life balance. Third, only a small share of the respondents with extended telework  
334 (17.3%) experience significant difficulties in combining different means of communication  
335 while performing telework.

336 <Fig. 3 about here>

337 Beyond the professional benefits, the negative effects of extended telework on non-  
338 career-related aspects are rather limited. About half of the employees with extended  
339 telework (57.2%) do not encounter additional conflicts with their family members as a result  
340 of the telework arrangements, nor are they more often disturbed by their family members  
341 (48.9%). However, the idea of reduced social interaction with their colleagues and employer  
342 are materialised, with almost two-thirds reporting a weaker bond with their colleagues

343 (64.0%) and more than half feeling less connected with their employer (56.0%).

344 In line with our results, Bolisani and colleagues [37] found that the obstacles and  
345 negative factors of smart working were, on the whole, perceived as less significant than the  
346 benefits in their online survey of smart workers in Italy during the COVID-19 pandemic. In  
347 addition, Syrek and colleagues [28] also found an increase in job satisfaction due to the  
348 extended telework in a Dutch sample. Furthermore, the research of Bolisani and colleagues  
349 [37] underlines the difficulty to maintain work contacts. Moreover, Carillo and colleagues  
350 [27] mention the lack of contacts and informal relationships with colleagues as well as the  
351 lack of feedback from managers as major obstacles to telework adjustments in France. In  
352 contrast to our findings, Syrek and colleagues [28] observed initial declines in work-non-  
353 work balance during the crisis' onset (March and April 2020) but observe a recovery of this  
354 balance after one month (as of May 2020).

355 An overview of the results of our descriptive analyses and linear regression analyses can  
356 be found in Table 3. The responses are again classified according to the personal and job  
357 characteristics surveyed, which will be discussed in subchapter 3.2. (in light of RQ2b). The  
358 survey items are analysed by analogy with those discussed in the previous subsection.

359 <Table 3 about here>

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### 361 **3.1.3. Perceived impact of the COVID-19 crisis on self-view of telework** 362 **and digital meetings**

363 Fig. 4 illustrates how the positive beliefs and experiences about increased telework extend  
364 to the correspondents' beliefs about the future of telework and digital meetings. About half  
365 of the panel members foster a more positive outlook on telework (52.0%) and organising  
366 digital meetings (50.8%) due to the COVID-19 crisis. These feelings translate into an  
367 increased desire to pursue more telework (62.7%) and to have more digital meetings  
368 (48.8%). The majority of the respondents believes that both telework (85.3%) and digital  
369 meetings (80.5%) will also occur more often in the future. In line with our findings, Diab-  
370 Bahman and Al-Enzi [40] find that the majority in their sample of Kuwaiti employees hope  
371 for changes to the conventional working conditions post-crisis, too.

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<Fig. 4 about here>

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Table 4 summarises the results of our descriptive analyses and linear regression analyses. Once more, the responses are classified according to the personal and job characteristics surveyed, which will be discussed in subchapter 3.2. (in light of RQ3b). The survey items are analysed by analogy with those discussed in the two previous subsections.

<Table 4 about here>

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## **3.2. Heterogeneity in the findings**

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### **3.2.1. Differences in the findings by gender**

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When it comes to telework in general (not in COVID-19 times), women are more positive regarding task efficiency, work concentration and relationships with colleagues. In this respect, our findings corroborate a growing body of evidence on telecommuting, such as the systematic review of Charalampous and colleagues [53] and the meta-analysis of Gajendran and Harrison [23]. That is, women reportedly experience a smaller negative effect of telework on potential work-family conflicts and a greater increase in job performance compared to men. An underlying explanation might be found in traditional gender roles, which presumably give women more care responsibilities than men. Telework can be a way to facilitate this combination.

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While women are more positive about certain aspects of telework in general, they are not significantly more positive about aspects of extended telework in COVID-19 times. Again, traditional gender roles might provide an explanation: it could be more difficult for women to combine care responsibilities with job-related responsibilities due to school and childcare closures in COVID-19 times [63].

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Thus, when not faced with an epidemic, the women in our sample are more often advocates of telework. They even become more fond of telework (in normal times) due to the COVID-19 crisis and indicate the strongest desire to perform more telework in the (post-crisis) future. In line with the findings of Nguyen and Armoogum [44] and Wong and colleagues [48], increased opportunities for telework are perceived by Flemish women as a solution to pre-existing burdens. Before the health crisis, Flanders already saw an increase

400 in telework—a tendency especially outspoken among women [64]. The obligatory telework  
401 during lockdown could have further stimulated this particular tendency. Whereas studies  
402 across the world indicate women’s mixed experiences with telework during the pandemic  
403 [36, 38-39, 42, 45], cross-country variations on (traditional) gender roles—regarding the  
404 division of labour—could underly these differences in telework experience, and  
405 consequently, women’s post-crisis outlook on telework [65].

### 406 **3.2.2. Differences in the findings by the number of resident children**

407 The answers to the questions on epidemic-induced telework (as opposed to telework in  
408 general) substantially vary by the number of resident children: respondents with children  
409 are less satisfied with the extended telework. This is not surprising as, during the COVID-19  
410 crisis, telework often has to be combined with taking care of children (due to the closure of  
411 schools and daycare facilities), which is a challenging combination that does not occur in  
412 regular telework situations [63]. Unsurprisingly, they experience more family conflicts, are  
413 more often disturbed by roommates and find it more difficult to combine different means  
414 of communication during the extended telework. Moreover, they less often report an  
415 improved work-life balance, stress management, burnout prevention and work  
416 concentration. Our findings are in line with the findings of Nguyen and Armoogum [44], who  
417 state that females living with at least two children are less likely to have a good perception  
418 of homeworking in the COVID-19 context.

### 419 **3.2.3. Differences in the findings by age**

420 What telework in general (not in COVID-19 times) is concerned, older respondents more  
421 often agree that it has a positive effect on their concentration. This might relate to the study  
422 of Aguilera and colleagues [51], who found that telework is often associated with a quieter  
423 and less stressful work environment, which older respondents may benefit more from when  
424 it comes to focusing on tasks.

425 More numerous, however, are the age differences in the items related to extended  
426 telework during the COVID-19 epidemic. Older employees report that they can work more  
427 efficiently, have higher levels of concentration, have a higher commitment and have better

428 burnout prevention thanks to the extended telework, amongst other things. In addition,  
429 older employees reportedly experience significantly fewer conflicts with family members  
430 due to the extended telework and are less often disturbed by them. Previous research has  
431 shown that older participants might be less accustomed to telework [66]. Our results,  
432 however, show that their experiences with telework are evaluated very positively. This  
433 might be related to the fact that older people are at higher risk from COVID-19 [67], and  
434 thus are more appreciative of the possibility of working from home. In general, several  
435 studies show that the level of fear of disease or concern about the COVID-19 virus plays a  
436 role in the evaluation of telework [44, 46].

437 While older employees are more outspoken on the benefits of telework in our sample,  
438 Raišiene and colleagues [45] find the opposite. In their study, older generations of  
439 employees in Lithuania tend to emphasize the disadvantages of telework, while younger  
440 employees tend to emphasize the advantages rather than the disadvantages of telework.  
441 Again, cultural differences might help in explaining these opposed findings. The authors  
442 state that Lithuanian companies have not enabled their employees to telework at the same  
443 rate as companies in other European countries have since 2005 [45]. Possibly, older  
444 employees (who thus belong to a generation that did not grow up with digital technologies)  
445 originating from a country where telework is less familiar might be more sceptical towards  
446 this new way of working. Another explanation could be the limited sample size in the study  
447 of Raišiene and colleagues [45], especially in comparison with our sample.

#### 448 **3.2.4. Differences in the findings by education level**

449 Respondents who attained a tertiary level of education are less positive when it comes to  
450 the effects of telework in general on promotion opportunities, professional development,  
451 task efficiency, commitment and relationships with colleagues. This is surprising because  
452 highly skilled and autonomous workers are the most likely group of workers to telecommute  
453 [51]. An explanation for this finding might be that these workers, being the most likely to  
454 telecommute, might already have been accustomed to the benefits of telework. Being more  
455 familiar with and being more accustomed to the benefits of telework, can also help in  
456 explaining why employees with a tertiary level of education more often state (i) to be well-  
457 guided by their employer during extended telework in COVID-19 times, (ii) not perceiving



458 difficulties to convince their employer to introduce extended telework because of the  
459 pandemic, (iii) not having a more positive self-view on telework because of the COVID-19  
460 crisis and (iv) not hoping to telework more often in the future.

461 In line with our results on professional isolation, Raišiene and colleagues [45] also find  
462 evidence of concerns about missing important information and doubts regarding manager's  
463 evaluation amongst higher-educated employees. However, they do observe that higher-  
464 educated employees experience a higher self-confidence and satisfaction with the  
465 opportunity to make independent decisions thanks to the extended telework, while lower-  
466 educated employees face a lower involvement and organizational commitment due to the  
467 extended telework. The authors interpret these results in terms of the nature of the work  
468 performed by higher-educated employees compared to lower-educated employees, which  
469 can help in explaining the difference with our findings (as we take into account task  
470 characteristics like autonomy, interaction and dependency, while Raišiene and colleagues  
471 [45] do not).

### 472 **3.2.5. Differences in the findings by migration background**

473 Interestingly, the respondents with a migration background in our panel report stronger  
474 positive effects of both telework in general as well as the extended telework than employees  
475 without a migration background. More precisely, they report a stronger positive impact of  
476 telework in general on their relationships with their colleagues and a higher commitment  
477 towards their employer. The latter also applies to extended telework. Moreover, they  
478 experience fewer professional conflicts and also found it less difficult to convince their  
479 employer to allow them to telecommute during the COVID-19 crisis.

480 Although these findings might equally relate to a selection problem, in the sense that a  
481 selective subset of persons with a migration background might have selected themselves  
482 for our sample, we put forward two potential explanations why employees with a migration  
483 background might fare better than others on these aspects. A first explanation is based on  
484 discrimination research that shows that, in jobs where interaction with colleagues and  
485 customers is prominent, ethnic minorities are more likely to be discriminated against in the  
486 selection process [68-73]. Under the assumption that telework, by definition, reduces  
487 physical, personal interaction [34], the negative effects of the perceived discrimination may

488 be reduced. A second explanation lies in the claim that ethnic salience—the extent to which  
489 one’s personally identifying characteristics and affiliations underscore one’s ethnicity (e.g.  
490 skin tone)—also contributes to increased discriminatory behaviour in a professional work  
491 context [74-77]. Working from home could make one's personal characteristics less  
492 conspicuous due to the barrier created by remoteness. Direct colleagues, for example,  
493 literally see each other less frequently (i.e. they have less face-to-face interaction [78-79].  
494 In these instances, ethnic cues are less noticeable and, potentially, diminish the negative  
495 repercussions of discriminatory behaviour.

### 496 **3.2.6. Differences in the findings by health status**

497 Employees that were uncertain about being infected by COVID-19 and employees that  
498 suspect or know they had been infected by COVID-19 at the moment of the data collection  
499 are more positive on the effect of extended telework on stress management, burnout  
500 prevention, work concentration and work-life balance (compared to employees that were  
501 (rather) sure they were not infected). An explanation could be that extended telework  
502 provides these employees with more peace of mind which could have a positive effect on  
503 their stress, burnout, concentration and work-life balance. In addition, employees that  
504 worry about their health might be more appreciative of the possibility of working from  
505 home.

### 506 **3.2.7. Differences in the findings by job characteristics**

507 Respondents who strongly depend on others in their job, as well as those who receive a lot  
508 of feedback, share the positive views of telework in general on work-life balance, stress  
509 management and burnout prevention less often. When one’s job is highly dependent on  
510 others, coordination problems with colleagues due to telework likely occur more frequently.  
511 Such coordination problems can cause enhanced negative consequences for telework [52].  
512 In turn, respondents who receive a lot of feedback, which is considered an important aspect  
513 of job satisfaction and job performance [80-81], might fear receiving less feedback when  
514 performing telework. In this respect, previous research has indeed shown that reduced face-  
515 to-face interaction restricts the possibility of giving immediate feedback or praise [30, 82].

516 This is exemplified by the findings of Carillo and colleagues [27], who identified that  
517 feedback (from the manager and the organisation at large) is one of the major obstacles in  
518 transitioning to extended telework in COVID-19 times.

519 Similar to general telework in normal times, those respondents who are more  
520 dependent on others in their jobs encounter more negative consequences from extended  
521 telework due to the COVID-19 crisis. In particular, during this period of extended telework,  
522 they report more conflicts with colleagues and family, are more disturbed by roommates,  
523 and have a harder time combining the different means of communication available to them.  
524 This is in line with the study of Carillo and colleagues [27] where work interdependence was  
525 found to negatively influence telework adjustment and the study of Chong and colleagues  
526 [83] where the authors found that daily COVID-19 task setbacks are positively related to  
527 next-day work withdrawal behaviour, especially for teleworkers who have higher task  
528 interdependence with their colleagues.

529 Lower general satisfaction with extended telework also applies to respondents who are  
530 used to receiving a lot of feedback, as well as those who are used to a lot of interaction  
531 outside their organisation and those experiencing high levels of job autonomy. The latter  
532 has also previously been reported (in non-COVID-19 times) by Baltes, Briggs, Huff, Wright,  
533 and Neuman [84] and Allen and Shockley [52], who found that managers and professionals  
534 who experience a greater degree of autonomy in their jobs benefitted to a lesser extent  
535 from flexible work arrangements in terms of work-life balance because telework potentially  
536 did not greatly alter their job characteristics. More detail on the differences based on job  
537 characteristics in the results concerning extended telework can be found in Table 3.

538 Finally, respondents who experience a high level of autonomy less often report an  
539 increasingly positive view on telework in COVID-19 times and have less of a desire to  
540 telework more in the future. The latter is also the case for respondents who receive a lot of  
541 feedback on their job. As illustrated above, the fear of a reduction in feedback might be  
542 related to this.

### 543 **3.2.8. Differences in the findings by sector**

544 Due to the large and diverse sample, our survey also allows for an initial exploration of

545 differences in perception across sectors.<sup>1</sup> First, workers active in education are less likely to  
546 experience the (potential) advantages of the suddenly extended telework. More concretely,  
547 compared to other sectors, workers in education report fewer gains in efficiency and  
548 concentration. These results can be explained by the numerous challenges educators face  
549 in terms of online learning and student assessments [85]. Second, we find that, in some  
550 sectors, workers experience more problems in combining different means of  
551 communication (the average across the total sample equals 17.3%). In particular, workers  
552 active in ICT, research and development and sales attest to this. One explanation for this  
553 result might be that workers from these sectors already spent a substantial amount of time  
554 organising electronic communication and, hence, have an increased risk of communication  
555 overload due to extended telework [e.g. 86]. In any case, our finding that approximately one  
556 in six Flemish workers experiences trouble in combining different sources of communication  
557 highlights the value of proper education on digital communication—even more so in the  
558 already digitally savvy sectors such as ICT, research and development and sales.

559 In general, the data suggest that many workers across sectors are won over by digital  
560 meetings. Indeed, 50.8% of the respondents in our sample hopes to have more digital  
561 meetings in the future. However, we find substantial heterogeneity across sectors in the  
562 impact of COVID-19 on perceptions regarding telework and digital meetings. We find that  
563 these hopes are even more common in sectors like human resources, management,  
564 marketing, education and sales. In contrast, we find that, again, workers from the ICT sector  
565 were less likely to report a positive impact of COVID-19 on their views regarding telework.  
566 These results implicate that, in the general workforce, there could be a willingness for  
567 further explorations of hybrid forms of tele- and on-site work. For policy-makers, we believe  
568 this heterogeneity in perceptions creates opportunities to guide the implementation of  
569 post-crisis telework through sector-specific agreements. This could be especially interesting  
570 in the Belgian (Flemish) context given Belgium’s rich collective bargaining structure [e.g. 87].

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<sup>1</sup> We, however, advise caution when interpreting sector differences for ‘creative’, ‘agriculture and horticulture’ and ‘maintenance’ because these levels of the sector-variable cover fairly modest shares of the sample—which is not surprising given the many distinct sectors that make up the Flemish labour market .

## 571 **4. Conclusion**

572 This article has provided insights into how a carefully composed sample of Flemish  
573 employees have experienced telework, both in general and in its extensive form due to the  
574 COVID-19 crisis, and how the COVID-19 crisis has affected their outlook on the future of  
575 telework and digital conferencing. In addition, we investigated how telework experiences  
576 and corresponding future outlooks are heterogeneous by personal and job characteristics.  
577 Thereby, we have not only contributed to the brand new scientific literature on the  
578 (expected) socioeconomic consequences of the COVID-19 crisis, but also to the overall  
579 scientific literature on telework.

580 The perceived effects of the extended telework on specific facets of the respondents'  
581 personal and professional lives are largely in line with the findings of previous studies. For  
582 example, many positive characteristics (e.g. increased efficiency and better work-life  
583 balance) have been attributed to telework, while, at the same time, potentially negative  
584 impacts on promotion opportunities and work relationships were underlined. To the  
585 satisfaction of two-thirds of the respondents, Flemish workers anticipate that the COVID-19  
586 crisis will make telework and digital conferencing much more common in the future in  
587 Belgium.

588 We found several associations between telework and other aspects of personal and  
589 professional life that, to the best of our knowledge, have not previously been documented  
590 in the scientific literature. First, our study zoomed in on the perceptions of employees on  
591 burnout prevention facilitated by telework. About half of the respondents indicated that  
592 telework helps them to lower the chance of burnout. This finding is especially true for older  
593 workers but to a lesser extent for those workers with a higher number of resident children.  
594 Second, we found that the respondents with a migration background report stronger  
595 positive effects of telework in that they have better relationships with colleagues and a  
596 higher commitment to their employer than employees without a migration background.  
597 Moreover, respondents with a migration background attribute fewer professional conflicts  
598 to the increased telework due to the COVID-19 crisis. As discussed, this finding appears to  
599 be consistent with previous empirical research on ethnic labour market discrimination.  
600 Because of the (extended) telework, there is less physical contact and hence less

601 opportunity for interethnic conflict to arise or discriminatory behaviour from colleagues,  
602 customers or employers to become apparent. We recommend that future studies, using  
603 different research designs, examine whether these associations are robust and reveal  
604 objective, causal mechanisms.

605 Because similar studies in other countries sometimes reveal opposing results [e.g. 36,  
606 45], another interesting direction for future research includes cross-country comparative  
607 research that takes cultural differences into account when it comes to the evaluation of  
608 epidemic-induced telework. The differences amongst cultures concerning traditional gender  
609 norms might play a role in how women versus men experience extended telework in times  
610 of a pandemic. Finally, experiences with extended telework might differ between countries  
611 where telework was already relatively common before the COVID-19 crisis (e.g. Belgium)  
612 and countries where the frequency of telework is at a low ebb.

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## 895 **Appendix A: Survey items concerning outcome variables**

### 896 **A.1. Perceived impact of telework in general on various career aspects**

897 The following statements are about your general view of telework (and therefore not  
898 specifically about the extended telework you may currently be experiencing). Do you think  
899 that telework in general has (or would have) a positive, negative or neutral effect on the  
900 following characteristics of your working life? Scale: certainly negative effect (1); rather  
901 negative effect (2); neither positive nor negative effect (3); rather positive effect (4);  
902 certainly positive effect (5).

903 (Overall job satisfaction) My overall satisfaction with my job.

904 (Promotion opportunities) My chances of promotion.

905 (Professional development) My professional development.

906 (Task efficiency) My efficiency in performing tasks.

907 (Commitment to employer) My feeling of connectedness with my employer.

908 (Work-life balance) My work-life balance.

909 (Relationship with colleagues) My relationship with my colleagues.

910 (Stress management) Minimise my work-related stress.

911 (Burnout prevention) Minimise my chances of burnout.

912 (Work concentration) My concentration during work.

### 913 **A.2. Perceived impact of extended telework during the COVID-19 crisis** 914 **on various life and career aspects**

915 The following statements are about your experience with extended telework due to the  
916 current COVID-19 crisis. Please indicate to what extent you agree with the statements on a  
917 scale from 'completely disagree' (1) to 'completely agree' (5).

918 (Happy with extended telework) I am globally satisfied that I am working more at home  
919 because of the corona crisis.

920 (More family conflicts related to extended telework) I have more conflicts with my family  
921 because I work more at home because of the corona crisis.

922 (More professional conflicts related to extended telework) I have more professional  
923 conflicts (e.g. with supervisor or colleagues) because I work more at home because of the  
924 corona crisis.

925 (Often disturbed by roommates during extended telework) I am often disturbed by  
926 family members during extended homework because of the corona crisis.

927 (Difficult to combine different means of communication during extended telework) I find  
928 it difficult to combine different means of communication (such as phone, e-mail and Skype)  
929 during extended homework due to the corona crisis.

930 (Well guided by my employer during extended telework) I feel well guided by my  
931 employer (or supervisor) during the extended homeworking due to the corona crisis.

932 (Difficult to convince employer to introduce extended telework) It was hard to persuade  
933 my employer to allow me to participate in extended telework.

934 (Higher task efficiency related to extended telework) I can do my job more efficiently  
935 during the extended homework because of the corona crisis.

936 (Higher commitment to employer related to extended telework) I feel more connected  
937 to my employer due to the extended homework because of the corona crisis.

938 (Better work-life balance related to extended telework) I am experiencing a better work-  
939 life balance due to the extended homework because of the corona crisis.

940 (Better relationship with colleagues related to extended telework) I feel a stronger bond  
941 with my colleagues due to the extended homework because of the corona crisis.

942 (Better stress management related to extended telework) I experience less work-related  
943 stress due to the extended homework because of the corona crisis.

944 (Better burnout prevention related to extended telework) I think the extended  
945 homework caused by the corona crisis is reducing my chances of burnout in the near future.

946 (Higher work concentration related to extended telework) I experience better  
947 concentration at work due to the extended homework because of the corona crisis.

948 **A.3. Perceived impact of the COVID-19 crisis on self-view of telework and**  
949 **digital meetings**

950 The following statements deal with the extent to which (i) the current corona crisis has  
951 changed your view of telework and digital conferencing and (ii) you think that telework and  
952 digital conferencing in general in our country will be boosted by the current corona crisis.  
953 Please indicate the extent to which you agree with the statements, on a scale from  
954 'completely disagree' (1) to 'completely agree' (5).

955 (More positive self-view of telework) Because of the current corona crisis, I now look  
956 more positively on telework.

957 (Hope for more telework in the future) Because of the current corona crisis, I hope to  
958 be able to do more telework in the future.

959 (Believe in overall more telework in country in future) Because of the current corona  
960 crisis, much more telework will be done in our country in the future.

961 (More positive self-view on digital meetings) Because of the current corona crisis, I now  
962 look more positively on digital meetings.

963 (Hope for more digital meetings in the future) Because of the current corona crisis, I  
964 hope that in the future more of my professional meetings will be held digitally.

965 (Believe in overall more digital meetings in the country in future) Because of the current  
966 corona crisis, many more digital meetings will be held in our country in the future.

967 **Appendix B: Additional tables**

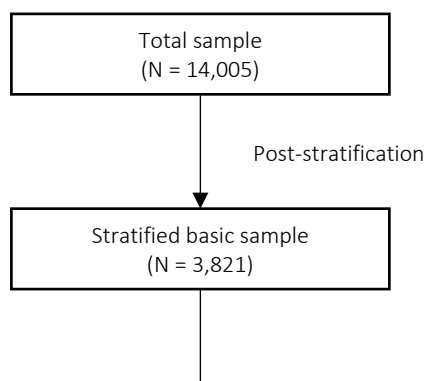
968 <Table B1 about here>

969

970 Fig. 1 Study sample and subsample

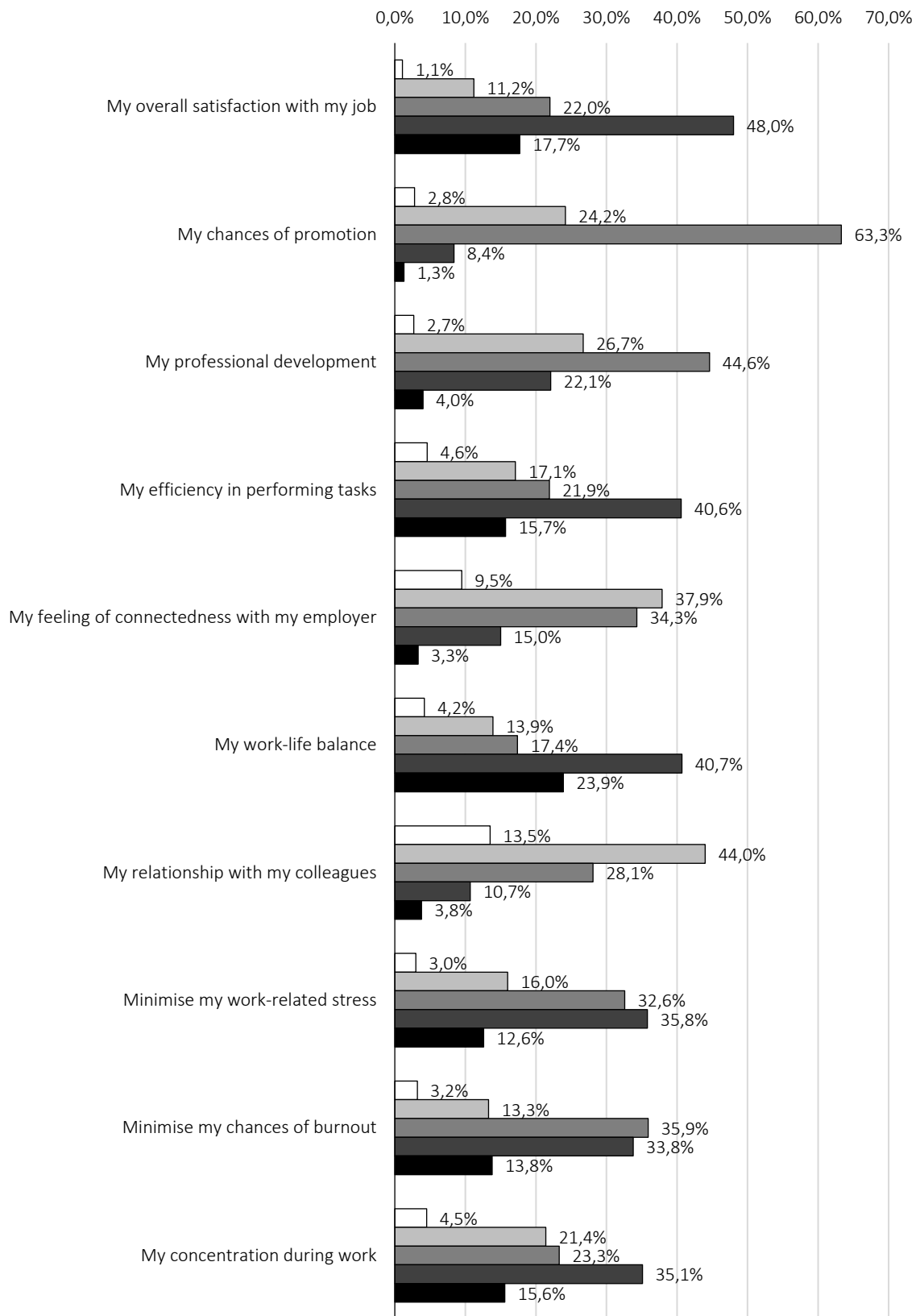
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972



973 Fig. 2 Perceived impact of telework in general on various career aspects: Answers given (N = 2,673)

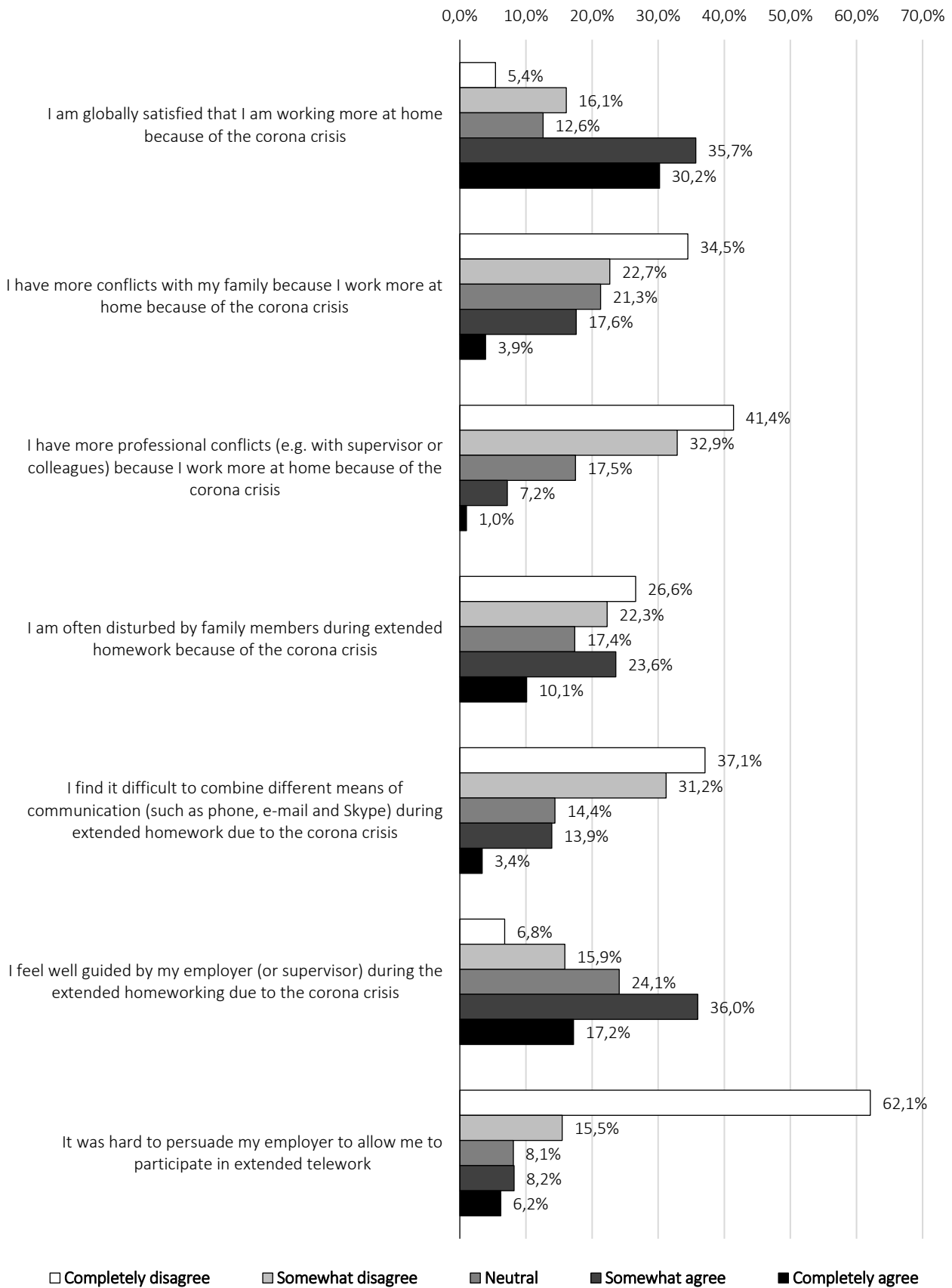
Do you think that telework in general has (or would have) a positive, negative or neutral effect on the following characteristics of your working life?



□ Certainly negative    ▒ Rather negative    ▓ Neither positive nor negative    ■ Rather positive    ■ Certainly positive

975 **Fig. 3** Perceived impact of extended telework during the COVID-19 crisis on various life and career aspects:

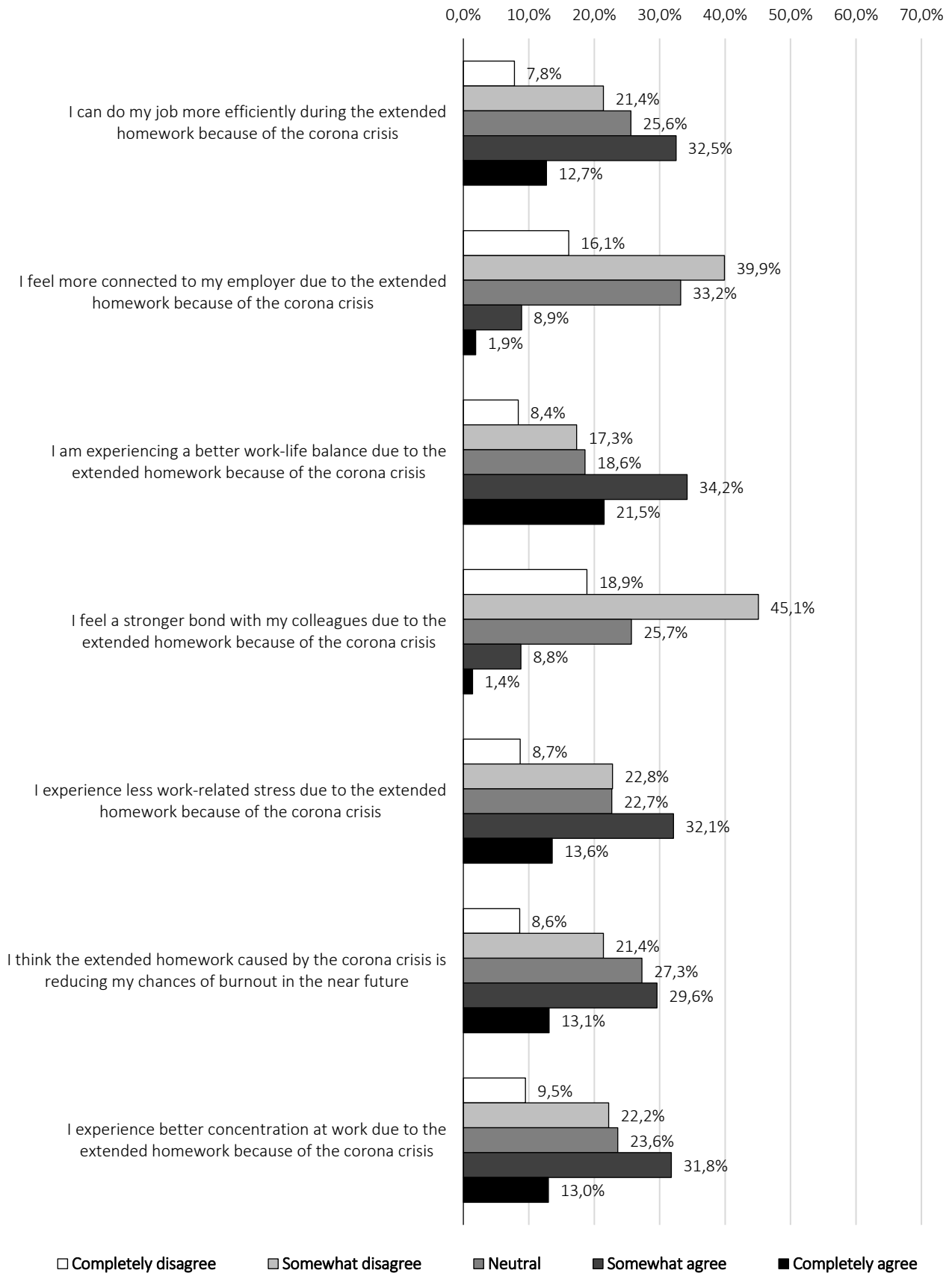
976 Answers given (N = 1,895)



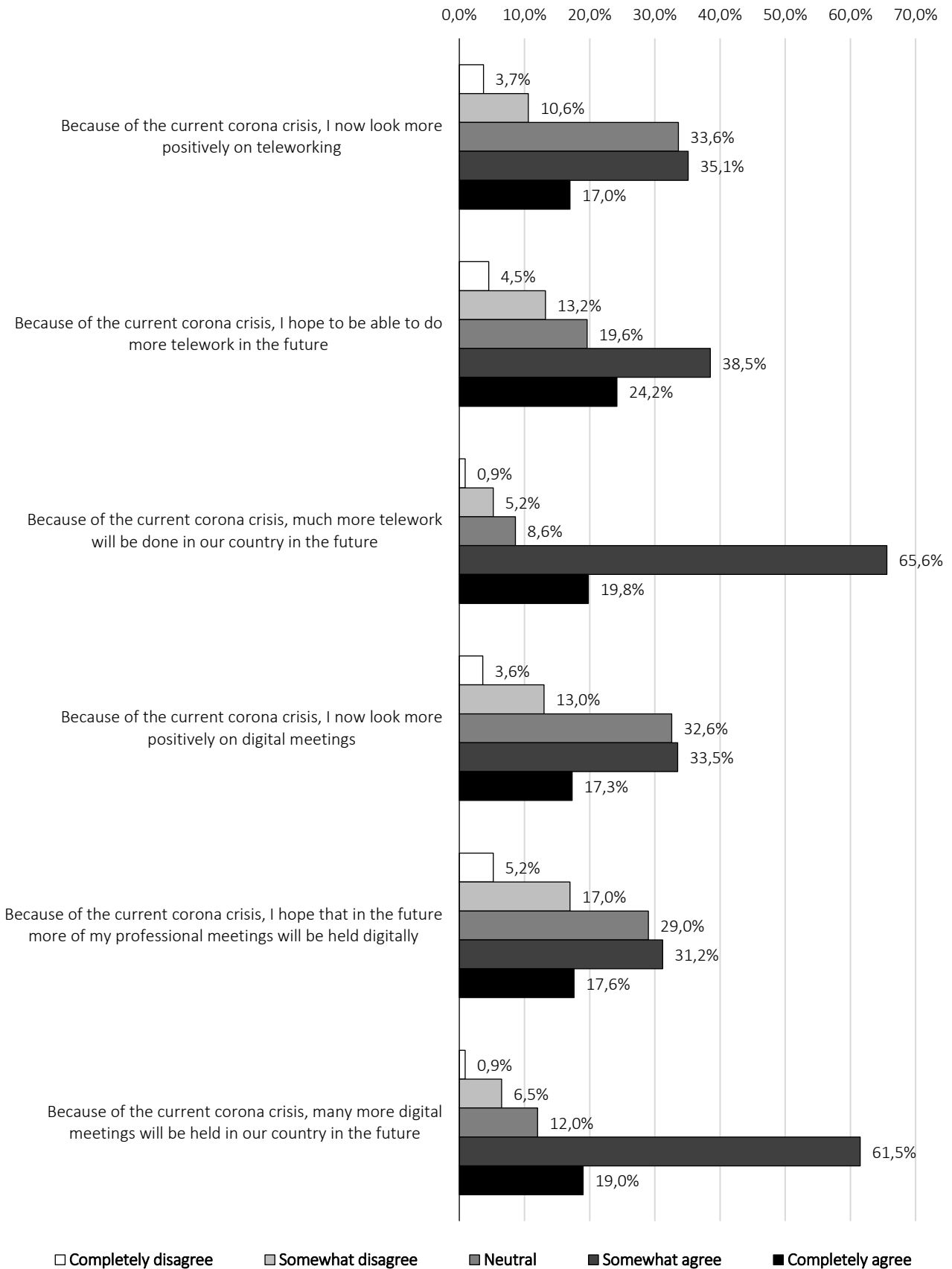
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979 **Fig. 3 (cont'd)** Perceived impact of extended telework during the COVID-19 crisis on various life and career  
 980 aspects: Answers given (N = 1,895)



982 **Fig. 4** Perceived impact of the COVID-19 crisis on self-view of telework and digital meetings: Answers given  
 983 (N = 2673)



**Table 1** Summary statistics

	Full study sample (N = 2,673)	Subsample: Temporarily extended telework (N = 1,895)
Female	0.510 (-)	0.516 (-)
Age	41.127 (10.665)	41.059 (10.576)
Migration background	0.026 (-)	0.028 (-)
Tertiary education	0.573 (-)	0.654 (-)
Single	0.192 (-)	0.183 (-)
In a relationship but not cohabiting	0.070 (-)	0.068 (-)
In a relationship and cohabiting	0.738 (-)	0.750 (-)
Number of resident children	0.923 (1.054)	0.945 (1.058)
Resident parents	0.067 (-)	0.062 (-)
Resident family members (other than parents)	0.035 (-)	0.032 (-)
Resident others (not family)	0.022 (-)	0.021 (-)
Province of Antwerp	0.273 (-)	0.274 (-)
Province of West Flanders	0.168 (-)	0.146 (-)
Province of East Flanders	0.318 (-)	0.325 (-)
Province of Limburg	0.065 (-)	0.061 (-)
Province of Flemish Brabant	0.175 (-)	0.193 (-)
Living in the countryside or rural area	0.364 (-)	0.372 (-)
Living in the centre of a village	0.255 (-)	0.240 (-)
Living in the suburbs of a city	0.224 (-)	0.227 (-)
Living in the centre of a city	0.157 (-)	0.161 (-)
Health before the COVID-19 crisis (scale)	4.138 (0.758)	4.147 (0.761)
Current health (scale)	3.943 (0.843)	3.976 (0.823)
Never been infected by COVID-19 (definitely or likely)	0.721 (-)	0.732 (-)
Uncertain about having been infected by COVID-19	0.207 (-)	0.195 (-)
Infected by COVID-19 at the moment (definitely or likely)	0.038 (-)	0.038 (-)
Infected by COVID-19 in the recent past (definitely or likely)	0.034 (-)	0.035 (-)
Employed on a temporary contract in the private sector	0.027 (-)	0.020 (-)
Employed on a permanent contract in the private sector	0.779 (-)	0.744 (-)
Employed on a regular contract in the public sector	0.086 (-)	0.103 (-)
Employed on a permanent appointment in the public sector	0.108 (-)	0.133 (-)
Part-time contract	0.150 (-)	0.144 (-)
Tenure with current employer (scale)	2.847 (1.427)	2.878 (1.418)
Tenure in current job (scale)	2.304 (1.255)	2.284 (1.234)
Satisfied with job (scale)	4.001 (0.906)	4.031 (0.899)
Autonomous in job (scale)	4.043 (1.011)	4.125 (0.949)
Dependent on others in job (scale)	3.159 (1.084)	3.136 (1.067)
Interaction outside of the organisation in job (scale)	3.632 (1.325)	3.576 (1.331)
Feedback from others in job (scale)	3.113 (1.147)	3.147 (1.114)



Sector: Purchasing	0.015 (-)	0.015 (-)
Sector: Administration	0.086 (-)	0.073 (-)
Sector: Construction	0.028 (-)	0.022 (-)
Sector: Communication	0.022 (-)	0.028 (-)
Sector: Creative	0.009 (-)	0.006 (-)
Sector: Provision of services	0.077 (-)	0.080 (-)
Sector: Financial	0.069 (-)	0.084 (-)
Sector: Health	0.037 (-)	0.026 (-)
Sector: Catering and tourism	0.019 (-)	0.004 (-)
Sector: Human Resources	0.061 (-)	0.068 (-)
Sector: ICT	0.102 (-)	0.129 (-)
Sector: Legal	0.019 (-)	0.024 (-)
Sector: Agriculture and horticulture	0.001 (-)	0.001 (-)
Sector: Logistics and transport	0.055 (-)	0.047 (-)
Sector: Management	0.056 (-)	0.060 (-)
Sector: Marketing	0.024 (-)	0.025 (-)
Sector: Maintenance	0.005 (-)	0.003 (-)
Sector: Education	0.048 (-)	0.063 (-)
Sector: Research and development	0.031 (-)	0.037 (-)
Sector: Government	0.056 (-)	0.069 (-)
Sector: Production	0.023 (-)	0.019 (-)
Sector: Technology	0.031 (-)	0.024 (-)
Sector: Sales	0.085 (-)	0.058 (-)
Sector: Other	0.040 (-)	0.035 (-)
Temporarily unemployed	0.145 (-)	0.000 (-)
% of work potentially done via telework	61.175 (28.073)	67.836 (24.907)
Temporarily extended telework	0.709 (-)	1.000 (-)

Notes. No standard deviations are presented for binary variables. The levels (and values) for the health scales are: very bad (1); somewhat bad (2); neither bad nor good (3); somewhat good (4); and very good (5). The levels for the tenure scales are: less than 2 years (1); between 2 and 5 years (2); between 6 and 10 years (3); between 11 and 20 years (4); and more than 20 years (5). The levels for the job scales are: completely disagree (1); somewhat disagree (2); neutral (3); somewhat agree (4); and completely agree (5). The operationalisation of these variables is based on [62, 88-91].

**Table 2** Perceived impact of telework in general on various career aspects: Regression results (full study sample; N = 2,673)

Aspect	% perceiving positive impact on aspect	Significantly more pronounced if ...	Significantly less pronounced if ...
Overall job satisfaction	65.7%	Province of East Flanders; better current health; longer tenure with current employer; more satisfied with job; sector is human resources or agriculture and horticulture; temporarily unemployed; higher % of work potentially done via telework; temporarily extended telework.	Living in the centre of a city; better health before COVID-19 crisis.
Promotion opportunities	9.7%	Uncertain about having been infected by COVID-19; more satisfied with job; more autonomous in job; more feedback from others in job; sector is agriculture and horticulture; higher % of work potentially done via telework.	Tertiary education; province of West Flanders; province of East Flanders; sector is communication, management or marketing.
Professional development	26.1%	Better current health; uncertain about having been infected by COVID-19; more satisfied with job; sector is agriculture and horticulture; higher % of work potentially done via telework.	Tertiary education; better health before COVID-19 crisis; sector is communication; temporarily extended telework.
Task efficiency	56.3%	Female; better current health; uncertain about having been infected by COVID-19; longer tenure with current employer; sector is human resources, agriculture and horticulture or marketing; temporarily unemployed; higher % of work potentially done via telework.	Tertiary education; better health before COVID-19 crisis; part-time contract.
Commitment to employer	18.4%	Migration background; better current health; sector is agriculture and horticulture; higher % of work potentially done via telework.	Tertiary education; better health before COVID-19 crisis.
Work-life balance	64.6%	In a relationship and cohabiting; province of East Flanders; better current health; uncertain about having been infected by COVID-19 or infected by COVID-19 for the moment; sector is agriculture and horticulture; temporarily unemployed; higher % of work potentially done via telework; temporarily extended telework.	Living in the centre of a city; more dependent on others in job; more feedback from others in job.
Relationship with colleagues	14.4%	Female; migration background; higher number of resident children; better current health; uncertain about having been infected by COVID-19; sector is maintenance; higher % of work potentially done via telework.	Tertiary education; better health before COVID-19 crisis; longer tenure with current employer; more satisfied with job; temporarily extended telework.
Stress management	48.4%	Better current health; temporarily unemployed; higher % of work potentially done via telework.	Higher number of resident children; better health before COVID-19 crisis; more dependent on others in job; more feedback from others in job; sector is education.
Burnout prevention	47.6%	Better current health; temporarily unemployed; higher % of work potentially done via telework.	Better health before COVID-19 crisis; more dependent on others in job; more feedback from others in job.
Work concentration	50.7%	Female; higher age; better current health; uncertain about having been infected by COVID-19; more interaction outside organisation in job; temporarily unemployed; higher % of work potentially done via telework.	Living in the centre of a city; better health before COVID-19 crisis; part-time contract; more feedback from others in job.

Notes. The proportion 'perceiving positive impact' corresponds to the sum of those who indicated 'certainly positive effect' and 'rather positive effect' to the related survey item (see Appendix A). The relationship to the personal and job characteristics was analysed by means of a linear regression analysis with heteroscedasticity-robust standard errors (in which all characteristics mentioned in Table 1 were included). The significance level was set as  $p < 0.05$ .

**Table 3** Perceived impact of extended telework during the COVID-19 crisis on various life and career aspects: Regression results (subsample with extended telework at moment of survey; N = 1,895)

Aspect	% perceiving impact on aspect	Significantly more pronounced if ...	Significantly less pronounced if ...
Happy with extended telework	65.9%	Better current health; part-time contract; sector is creative or health; higher % of work potentially done via telework.	Higher number of resident children; living in the centre of a village or living in the centre of a city; better health before COVID-19 crisis; more satisfied with job; more autonomous in job, more dependent on others in job; more interaction outside organisation in job; more feedback from others in job.
More family conflicts related to extended telework	21.5%	Higher number of resident children; better health before COVID-19 crisis; more dependent on others in job.	Higher age; province of Limburg; better current health; uncertain about having been infected by COVID-19; higher % of work potentially done via telework.
More professional conflicts related to extended telework	8.2%	Resident family members (other than parents); resident others (no family); better health before COVID-19 crisis; more dependent on others in job; sector is catering and tourism.	Migration background; resident parents; better current health; more satisfied with job; more feedback from others in job; higher % of work potentially done via telework.
Often disturbed by roommates during extended telework	33.7%	In a relationship and cohabiting; higher number of resident children; more dependent on others in job.	Higher age; better current health; sector is agriculture and horticulture; higher % of work potentially done via telework.
Difficult to combine different means of communication during extended telework	17.3%	Higher number of resident children; province of West Flanders; longer tenure in current job; more dependent on others in job.	In a relationship and cohabiting; resident parents; better current health; longer tenure with current employer; more autonomous in job; more feedback from others in job; sector is ICT, research and development or sales; higher % of work potentially done via telework.
Well guided by my employer during extended telework	53.2%	Tertiary education; living in the centre of a village; better current health; more satisfied with job; more feedback from others in job; sector is agriculture and horticulture; higher % of work potentially done via telework.	Sector is creative.
Difficult to convince employer to introduce extended telework	14.4%	Province of West Flanders; infected by COVID-19 for the moment (probably); sector is maintenance.	Higher age; migration background; tertiary education; more satisfied with job; more autonomous in job; more feedback from others in job.

Higher task efficiency related to extended telework	45.2%	Higher age; province of East Flanders; better current health; higher % of work potentially done via telework.	Better health before COVID-19 crisis; more feedback from others in job; sector is education.
Higher commitment to employer related to extended telework	10.8%	Higher age; migration background; better current health; higher % of work potentially done via telework.	Living in the centre of a village; better health before COVID-19 crisis.
Better work-life balance related to extended telework	55.7%	Province of Limburg; better current health; uncertain about having been infected by COVID-19, infected by COVID-19 for the moment (probably); infected by COVID-19 in the recent past (probably); sector is human resources; higher % of work potentially done via telework.	Higher number of resident children; living in the centre of a city; better health before COVID-19 crisis; more autonomous in job; more feedback from others in job.
Better relationship with colleagues related to extended telework	10.2%	Higher age; province of East Flanders; better current health; higher % of work potentially done via telework.	Better health before COVID-19 crisis; more satisfied with job.
Better stress management related to extended telework	45.7%	Better current health; uncertain about having been infected by COVID-19, infected by COVID-19 for the moment (probably) or infected by COVID-19 in the recent past (probably); higher % of work potentially done via telework.	Higher number of resident children; better health before COVID-19 crisis; more dependent on others in job; more feedback from others in job.
Better burnout prevention related to extended telework	42.7%	Higher age; better current health; infected by COVID-19 for the moment (probably) or infected by COVID-19 in the recent past (probably); higher % of work potentially done via telework.	Higher number of resident children; better health before COVID-19 crisis; more feedback from others in job.
Higher work concentration related to extended telework	44.7%	Higher age; better current health; infected by COVID-19 for the moment (probably); employed in public sector; higher % of work potentially done via telework.	Higher number of resident children; better health before COVID-19 crisis; more dependent on others in job; more feedback from others in job; sector is education.

Notes. The proportion 'perceiving impact' corresponds to the sum of those who indicated 'completely agree' and 'somewhat agree' to the related survey item (see Appendix A). The relationship to the personal and job characteristics was analysed by means of a linear regression analysis with heteroscedasticity-robust standard errors (in which all characteristics mentioned in Table 1 were included). The significance level was set as  $p < 0.05$ .

**Table 4** Perceived impact of the COVID-19 crisis on self-view of telework and digital meetings: Regression results (full study sample; N = 2,673)

View	% perceiving impact	Significantly more pronounced if ...	Significantly less pronounced if ...
More positive self-view of telework	52.0%	Female; in a relationship but not cohabiting; better current health; infected by COVID-19 for the moment (probably); temporarily unemployed; higher % of work potentially done via telework.	Tertiary education; more autonomous in job; sector is ICT or legal.
Hope for more telework in the future	62.7%	Female; in a relationship but not cohabiting or in a relationship and cohabiting; uncertain about having been infected by COVID-19; sector is creative, agriculture and horticulture or marketing; temporarily unemployed; higher % of work potentially done via telework; temporarily extended telework.	Tertiary education; living in the centre of a city; more satisfied with job; more autonomous in job; more feedback from others in job.
Believe in overall more telework in country in future	85.3%	Resident family members (other than parents); better health for the moment; employed on permanent appointment in public sector; part-time contract; more feedback from others in job; temporarily extended telework.	
More positive self-view on digital meetings	50.8%	Better current health; sector is agriculture and horticulture; higher % of work potentially done via telework.	
Hope for more digital meetings in the future	48.8%	Higher number of resident children; province of Limburg; sector is human resources, agriculture and horticulture, management, marketing, education or sales; higher % of work potentially done via telework.	
Believe in overall more digital meetings in the country in future	80.5%	Tertiary education; resident family members (other than parents); part-time contract; more feedback from others in job.	Longer tenure in current job.

Notes. The proportion 'perceiving impact' corresponds to the sum of those who indicated 'completely agree' and 'somewhat agree' to the related survey item (see Appendix A). The relationship to the personal and job characteristics was analysed by means of a linear regression analysis with heteroscedasticity-robust standard errors (in which all characteristics mentioned in Table 1 were included). The significance level was set as  $p < 0.05$ .

**Table B1** Perceived positive impact of telework on overall job satisfaction: Full regression estimates

	Linear regression analysis	Ordered logistic regression analysis
Female	0.058 (0.040)	0.115 (0.086)
Age	-0.002 (0.002)	-0.006 (0.005)
Migration background	-0.080 (0.125)	-0.120 (0.275)
Tertiary education	-0.047 (0.039)	-0.102 (0.082)
Single (reference)		
In a relationship but not cohabiting	0.072 (0.079)	0.153 (0.171)
In a relationship and cohabiting	0.007 (0.051)	-0.016 (0.106)
Number of resident children	0.010 (0.018)	0.027 (0.039)
Resident parents	-0.140 (0.096)	-0.300 (0.208)
Resident family members (other than parents)	0.095 (0.106)	0.128 (0.228)
Resident others (not family)	0.125 (0.119)	0.224 (0.236)
Province of Antwerp (reference)		
Province of West Flanders	-0.018 (0.055)	-0.022 (0.113)
Province of East Flanders	0.098** (0.045)	0.233** (0.096)
Province of Limburg	0.044 (0.076)	0.133 (0.160)
Province of Flemish Brabant	0.076 (0.054)	0.182 (0.115)
Living in the countryside or rural area (reference)		
Living in the centre of a village	-0.020 (0.045)	-0.048 (0.096)
Living in the suburbs of a city	-0.020 (0.047)	-0.051 (0.100)
Living in the centre of a city	-0.121** (0.057)	-0.234** (0.118)
Health before the COVID-19 crisis (scale)	-0.068** (0.034)	-0.157** (0.074)
Current health (scale)	0.090*** (0.032)	0.203*** (0.067)
Never been infected by COVID-19 (definitely or likely) (reference)		
Uncertain about having been infected by COVID-19	0.084* (0.043)	0.167* (0.091)
Infected by COVID-19 at the moment (definitely or likely)	0.081 (0.105)	0.224 (0.233)
Infected by COVID-19 in the recent past (definitely or likely)	0.148 (0.095)	0.309 (0.214)
Employed on a temporary contract in the private sector (reference)		
Employed on a permanent contract in the private sector	-0.069 (0.111)	-0.175 (0.239)
Employed on a regular contract in the public sector	-0.048 (0.127)	-0.120 (0.274)
Employed on a permanent appointment in the public sector	-0.080 (0.127)	-0.212 (0.273)
Part-time contract	-0.022 (0.051)	-0.056 (0.108)
Tenure with current employer (scale)	0.043** (0.020)	0.096** (0.042)
Tenure in current job (scale)	-0.038* (0.021)	-0.081* (0.045)
Satisfied with job (scale)	0.101*** (0.025)	0.227*** (0.054)
Autonomous in job (scale)	0.003 (0.019)	0.008 (0.041)
Dependent on others in job (scale)	-0.024 (0.017)	-0.046 (0.037)
Interaction outside of the organisation in job (scale)	0.018 (0.015)	0.040 (0.032)
Feedback from others in job (scale)	-0.015 (0.017)	-0.028 (0.038)
Sector: Purchasing	-0.101 (0.165)	-0.154 (0.339)
Sector: Administration	0.017 (0.098)	0.079 (0.202)
Sector: Construction	0.143 (0.129)	0.428 (0.263)
Sector: Communication	-0.117 (0.155)	-0.155 (0.342)
Sector: Creative	0.109 (0.199)	0.298 (0.414)
Sector: Provision of services	0.029 (0.099)	0.129 (0.208)
Sector: Financial	0.065 (0.102)	0.225 (0.221)

Sector: Health	-0.088 (0.129)	0.011 (0.264)
Sector: Catering and tourism	-0.201 (0.155)	-0.276 (0.295)
Sector: Human Resources	0.237** (0.102)	0.592*** (0.223)
Sector: ICT	0.004 (0.099)	0.095 (0.213)
Sector: Legal	-0.076 (0.166)	0.045 (0.356)
Sector: Agriculture and horticulture	0.386*** (0.117)	0.740*** (0.237)
Sector: Logistics and transport	0.147 (0.110)	0.417* (0.230)
Sector: Management	0.047 (0.108)	0.183 (0.228)
Sector: Marketing	0.188 (0.134)	0.433 (0.303)
Sector: Maintenance	0.090 (0.179)	0.237 (0.344)
Sector: Education	-0.044 (0.127)	-0.001 (0.271)
Sector: Research and development	0.027 (0.130)	0.190 (0.274)
Sector: Government	0.191 (0.117)	0.467* (0.258)
Sector: Production	0.178 (0.138)	0.483* (0.283)
Sector: Technology	0.182 (0.126)	0.471* (0.268)
Sector: Sales	0.048 (0.100)	0.192 (0.212)
Sector: Other (reference)		
Temporarily unemployed	0.199*** (0.068)	0.422*** (0.136)
% of work potentially done via telework	0.006*** (0.001)	0.014*** (0.002)
Temporarily extended telework	0.184*** (0.057)	0.384*** (0.115)
N	2,673	2,673
R <sup>2</sup> (adjusted) / McFadden R <sup>2</sup>	0.087 (0.066)	0.037

Notes. The presented statistics are coefficient estimates and standard errors in parentheses based on a regression analysis with heteroscedasticity-robust standard errors. Intercepts and cut-off values are not presented. \* (\*\*) (\*\*\*) indicates significance at the 10% (5%) ((1%)) level. The significance levels cannot be given an absolute interpretation due to potential multiple testing problems (false positives).