

1 **Supplementary File**

2 <https://doi.org/10.17645/si.v11i4.7082>

3 **The Digitalization Boost of the Covid-19 Pandemic and Changes in Job**
 4 **Quality**

5 **Table A1.** Statistics of the socio-demographic distribution in the analysis sample and in each occupational field.

	<i>N</i>	man (%)	age (years)	full-time (%)	Telework (1-5) (%)
Overall	3250	50.25	54.10	64.00	1.29
1) Agriculture, forestry, farming, gardening	40	57.50	56.48	67.50	1.23
2) Production, processing of raw materials	500	84.80	53.74	86.60	1.04
3) Construction, architecture, surveying	132	84.84	55.90	84.09	0.74
4) Science, ICT	198	73.73	53.06	78.28	2.52
5) Traffic, logistics, security	252	70.63	55.02	71.83	0.37
6) Purchasing, sales, trading, tourism	283	43.46	55.18	56.18	1.11
7) Business management & organization	884	37.78	54.04	59.50	1.61
8) Health care, education, teaching	860	26.98	53.66	48.14	1.10
9) Humanities, social sciences, economics, arts	101	60.40	53.35	73.27	2.44

6 Note: The table displays sample characteristics for each occupational field, encoded as 1-digit code of the German
 7 classification of occupations (KldB-2010). Source: NEPS-SC6 SUF13.00, wave 2020–2021, unweighted data.

8 **Table A2.** Wording of all items.

Item label	Item text	Response scale
Comfortable working hours	I have comfortable working hours.	1 “strongly disagree” to 5 “strongly agree”
Work-family reconciliation	In my job I have the opportunity to reconcile work and family life well.	1 “strongly disagree” to 5 “strongly agree”
Autonomy	I have a high degree of independence or self-determination.	1 “strongly disagree” to 5 “strongly agree”

Information overload	In my job, I often receive too much information at once through networked digital technologies.	1 “does not apply at all” to 5 “fully applies”
Use of NDT	Guttman scale <ol style="list-style-type: none"> 1) Do you use the internet or intranet to search for information? 2) Do you create or edit digital files in your job? 3) Do you exchange files with other people using networked digital technologies? An example of file sharing via networked digital technologies is the use of email, internal data servers or cloud systems. 4) Do you maintain websites in your job? An example of maintaining websites is the updating of social media content, or the technical modification of websites, for example via content management systems. 5) Do you create new websites in your job? 6) Do you program algorithms for intelligent systems in your job? 	0 “no” and 1 “yes”
Assessment of workplace digitalization	How strongly is your job as <preload job> characterized by the use of networked digital technologies?	1 “not at all” to 5 “very strongly”
Telework	And how often do you work from home in your job as <preload job> today?	1 “never”, 2 “once a month or less”, 3 “several times a month or once a week”, 4 “several times a week”, and 5 “almost daily or daily”

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11 **Table A3.** Item characteristics for all variables.

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of NDT (2019–2020)	3250	0.42	0.2	0	1
Use of NDT (2020–2021)	3250	0.44	0.19	0	1
Comf. work. hours (2019–2020)	3250	0.77	0.25	0	1
Comf. work. hours (2020–2021)	3250	0.75	0.25	0	1
Reconciliation (2019–2020)	3250	0.75	0.26	0	1
Reconciliation (2020–2021)	3250	0.69	0.26	0	1
Autonomy (2019–2020)	3250	0.75	0.23	0	1
Autonomy (2020–2021)	3250	0.77	0.21	0	1
Information overload (2019–2020)	3250	0.41	0.28	0	1
Information overload (2020–2021)	3250	0.46	0.28	0	1
Man	3250	0.5	0.5	0	1
Age	3250	54.1	8.24	34.92	77.92
University degree	3250	0.35	0.48	0	1
Full-time work	3250	0.64	0.48	0	1
Children < 6	3250	0.08	0.27	0	1
Children < 14	3250	0.2	0.4	0	1
Telework	3250	1.29	1.62	0	4
Short-time work	3250	0.18	0.38	0	1

12 Source: NEPS SC6 SUF 13.00, wave 2019–2020 and 2020–2021, unweighted data.

13 **Table A4.** Analyses of Variance – Do occupational fields differ in job quality and digitalization?

	ANOVA
Comfortable working hours	F (8, 484.07) = 13.57, $p < .001$
Work-family reconciliation	F (8, 485.15) = 9.60, $p < .001$
Autonomy	F (8, 485.74) = 5.64, $p < .001$
Information overload	F (8, 3241) = 15.79, $p < .001$
Use of NDT	F (8, 481.08) = 64.89, $p < .001$

14 Source: NEPS SC6 SUF 13.00, wave 2019–2020.

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17 **Table A5.** T-test with repeated measures – Did job quality and digitalization change?

	Comf. work. hours	Reconciliation	Autonomy	Information overload	Use of NDT
Overall	t(3249) = 4.41, <i>p</i> <.001	t(3249) = 12.41, <i>p</i> <.001	t(3249) = -5.34, <i>p</i> <.001	t(3249) = -9.38, <i>p</i> <.001	t(3249) = -8.90, <i>p</i> <.001
1) Agriculture	t(39) = 0.86, <i>p</i> =.3933	t(39) = 1.65, <i>p</i> =.1068	t(39) = 0.78, <i>p</i> =.4397	t(39) = -0.98, <i>p</i> =.3333	t(39) = -1.64, <i>p</i> =.1095
2) Production	t(499) = 2.69, <i>p</i> =.0073	t(499) = 4.78, <i>p</i> <.001	t(499) = -2.71, <i>p</i> =.0070	t(499) = -2.72, <i>p</i> = .0067	t(499) = -4.32, <i>p</i> <.001
3) Construction	t(131) = 1.43, <i>p</i> =.1544	t(131) = 2.10, <i>p</i> =.0380	t(131) = -2.09, <i>p</i> =.0385	t(131) = -1.31, <i>p</i> =.1927	t(131) = -1.77, <i>p</i> =.0791
4) Science, ICT	t(197) = 0.72, <i>p</i> =.4739	t(197) = 3.30, <i>p</i> =.0011	t(197) = 0.84, <i>p</i> =.3994	t(197) = -0.92, <i>p</i> =.3581	t(197) = -1.45, <i>p</i> =.1479
5) Logistics, Security	t(251) = 1.03, <i>p</i> =.3028	t(251) = 2.19, <i>p</i> =.0298	t(251) = -4.30, <i>p</i> <.001	t(251) = -3.84, <i>p</i> <.001	t(251) = -2.86, <i>p</i> =.0046
6) Trade	t(282) = 1.13, <i>p</i> =.2613	t(282) = 3.20, <i>p</i> =.0016	t(282) = -2.11, <i>p</i> =.0354	t(282) = -2.14, <i>p</i> =.0334	t(282) = -3.16, <i>p</i> =.002
7) Business management	t(883) = 2.52, <i>p</i> =.0117	t(883) = 5.77, <i>p</i> <.001	t(883) = -0.24, <i>p</i> =.8112	t(883) = -3.66, <i>p</i> <.001	t(883) = -2.70, <i>p</i> =.0070
8) Health, education	t(859) = 1.91, <i>p</i> =.0562	t(859) = 8.94, <i>p</i> <.001	t(859) = -3.64, <i>p</i> <.001	t(859) = -7.00, <i>p</i> <.001	t(859) = -5.56, <i>p</i> <.001
9) Social sciences	t(100) = -0.73, <i>p</i> =.4696	t(100) = 0.11, <i>p</i> =.9153	t(100) = -0.97, <i>p</i> =.3345	t(100) = -2.42, <i>p</i> =.0172	t(100) = -1, <i>p</i> =.3197

18 Source: NEPS SC6 SUF 13.00, wave 2019–2020 and 2020–2021.

19 **Table A6.** Change score models – Is change in digitalization associated with change in job quality?

	Comf. work. hours		Reconciliation		Autonomy		Information overload			
	β	SE	β	SE	β	SE	β	SE		
Overall										
Intercept	0.28 *	0.13	0.52 ***	0.13	0.56 ***	0.11	0.16	0.15		
Δ Use of NDT	-0.01	0.03	0.01	0.03	-0.02	0.02	0.14 ***	0.03		
Telework	0.02 ***	0.00	0.02 ***	0.00	0.00	0.00	0.02 ***	0.00		
Job quality 2019–2020	-0.45 ***	0.01	-0.47 ***	0.01	-0.55 ***	0.01	-0.49 ***	0.01		
Man	0.00	0.01	0.01	0.01	0.00	0.01	-0.01	0.01		
University degree	-0.01	0.01	-0.01	0.01	0.00	0.01	0.02 +	0.01		
Age	0.00	0.00	-0.01 +	0.01	-0.01	0.00	0.00	0.01		
Age ²	0.00	0.00	0.00 *	0.00	0.00	0.00	0.00	0.00		
Full-time work	-0.04 ***	0.01	-0.07 ***	0.01	0.00	0.01	0.03 **	0.01		
Children < 6	0.02	0.02	0.02	0.02	0.01	0.02	-0.01	0.02		
Children < 14	0.00	0.01	0.01	0.01	0.00	0.01	0.02	0.01		
Short-time work	0.01	0.01	0.01	0.01	0.02 *	0.01	-0.03 **	0.01		
1) Agriculture, forestry, farming, gardening										
Intercept	-0.46	1.73	-0.53	1.47	-0.94	1.26	-0,64	2.08		
Δ Use of NDT	-0.52 *	0.21	-0.42 *	0.18	0.07	0.16	0.32	0.25		
Telework	0.01	0.02	0.02	0.02	-0.02	0.02	0.03	0.03		

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Job quality 2019–2020	-0.64 ***	0.13	-0.62 ***	0.15	-0.46 ***	0.11	-0.56 **	0.19	
Man	0.02	0.09	0.00	0.08	-0.09	0.07	-0.11	0.10	
University degree	0.08	0.10	-0.02	0.09	0.08	0.07	0.00	0.12	
Age	0.04	0.06	0.04	0.05	0.06	0.05	0.02	0.08	
Age ²	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Full-time work	-0.09	0.09	-0.02	0.07	-0.06	0.06	0.16	0.10	
Children < 6	-0.25	0.20	-0.24	0.17	-0.15	0.15	-0.19	0.23	
Children < 14	-0.06	0.20	-0.03	0.17	0.11	0.15	0.33	0.24	
Short-time work	0.07	0.11	0.07	0.10	-0.15	0.09	-0.11	0.13	
2) Production, processing of raw materials									
Intercept	1.10 **	0.38	0.50	0.38	0.50	0.32	-0.03	0.40	
Δ Use of NDT	0.05	0.08	0.10	0.08	-0.05	0.06	0.03	0.08	
Telework	0.03 ***	0.01	0.02 **	0.01	0.00	0.01	0.02 *	0.01	
Job quality 2019–2020	-0.49 ***	0.04	-0.51 ***	0.04	-0.56 ***	0.03	-0.52 ***	0.04	
Man	0.01	0.03	0.02	0.03	0.00	0.03	0.07 *	0.03	
University degree	-0.02	0.02	0.02	0.02	0.03	0.02	0.04 +	0.03	
Age	-0.03 *	0.01	-0.01	0.02	-0.01	0.01	0.01	0.02	
Age ²	0.00 *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Full-time work	-0.04	0.03	-0.11 ***	0.03	0.02	0.03	0.02	0.03	
Children < 6	0.00	0.04	-0.06	0.04	0.07	0.04	0.06	0.05	
Children < 14	0.01	0.03	0.03	0.03	-0.02	0.03	0.02	0.03	
Short-time work	0.02	0.02	0.02	0.02	0.03	0.02	-0.03	0.02	
3) Construction, architecture, surveying									
Intercept	-0.67	0.72	0.04	0.78	0.30	0.63	-0.43	1.02	
Δ Use of NDT	-0.05	0.14	-0.13	0.16	0.08	0.13	0.37 +	0.20	
Telework	0.00	0.01	-0.01	0.02	-0.01	0.01	-0.00	0.02	
Job quality 2019–2020	-0.34 ***	0.07	-0.33 ***	0.07	-0.49 ***	0.08	-0.54 ***	0.09	
Man	0.03	0.05	0.11 +	0.06	-0.04	0.05	-0.01	0.08	
University degree	-0.01	0.04	-0.02	0.05	-0.05	0.04	0.09	0.06	
Age	0.03	0.03	0.01	0.03	0.01	0.02	0.03	0.04	
Age ²	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Full-time work	-0.08	0.05	-0.14 *	0.05	-0.04	0.04	-0.04	0.07	
Children < 6	0.15	0.11	0.01	0.12	0.17 +	0.10	0.05	0.15	
Children < 14	0.04	0.08	0.04	0.09	-0.01	0.07	-0.01	0.11	
Short-time work	0.01	0.05	-0.02	0.06	-0.01	0.05	-0.03	0.07	
4) Science, ICT									
Intercept	1.19 **	0.46	0.39	0.52	0.73	0.49	0.55	0.58	

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Δ Use of NDT	0.04	0.09	-0.10	0.10	-0.05	0.10	0.21 +	0.12	
Telework	0.01	0.01	0.02 +	0.01	-0.00	0.01	0.02 *	0.01	
Job quality 2019–2020	-0.52 ***	0.06	-0.45 ***	0.06	-0.59 ***	0.07	-0.47 ***	0.06	
Man	0.00	0.03	0.01	0.04	0.03	0.04	-0.06	0.04	
University degree	-0.02	0.02	-0.02	0.03	-0.01	0.03	-0.02	0.03	
Age	-0.03 +	0.02	0.00	0.02	-0.01	0.02	-0.02	0.02	
Age ²	0.00 +	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Full-time work	-0.01	0.04	0.00	0.04	0.06	0.04	0.02	0.05	
Children < 6	0.02	0.06	-0.03	0.06	0.04	0.06	0.09	0.07	
Children < 14	0.00	0.04	-0.06	0.04	-0.01	0.04	0.05	0.05	
Short-time work	-0.07 *	0.03	-0.03	0.04	0.00	0.04	-0.05	0.04	
5) Traffic, logistics, security									
Intercept	-0.22	0.52	0.89 +	0.54	0.10	0.45	-0.23	0.55	
Δ Use of NDT	-0.10	0.10	-0.06	0.11	0.07	0.09	0.30 **	0.11	
Telework	0.04 **	0.02	0.05 ***	0.02	0.02	0.01	0.02	0.02	
Job quality 2019–2020	-0.54 ***	0.05	-0.52 ***	0.05	-0.56 ***	0.04	-0.46 ***	0.06	
Man	-0.05	0.04	-0.04	0.04	-0.04	0.03	0.01	0.04	
University degree	-0.04	0.06	-0.01	0.06	0.03	0.05	-0.06	0.06	
Age	0.02	0.02	-0.02	0.02	0.01	0.02	0.01	0.02	

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Age ²	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Full-time work	-0.08 *	0.04	-0.09 *	0.04	0.04	0.04	0.08 +	0.05	
Children < 6	0.07	0.08	0.10	0.08	0.09	0.07	0.04	0.08	
Children < 14	0.04	0.05	0.05	0.05	0.00	0.04	0.03	0.05	
Short-time work	0.07 +	0.04	0.04	0.04	0.06 +	0.03	0.01	0.04	
6) Purchasing, sales, trading, tourism									
Intercept	0.14	0.48	0.19	0.47	1.05 *	0.42	0.92 +	0.50	
Δ Use of NDT	-0.03	0.10	-0.04	0.10	0.05	0.08	0.20 +	0.10	
Telework	0.03 ***	0.01	0.02 *	0.01	0.01	0.01	0.03 ***	0.01	
Job quality 2019–2020	-0.41 ***	0.05	-0.43 ***	0.05	-0.58 ***	0.05	-0.52 ***	0.05	
Man	0.01	0.03	0.00	0.03	-0.02	0.03	-0.03	0.03	
University degree	0.00	0.04	0.01	0.03	-0.01	0.03	0.05	0.04	
Age	0.00	0.02	0.00	0.02	-0.02	0.02	-0.03	0.02	
Age ²	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Full-time work	-0.03	0.03	-0.09 **	0.03	0.01	0.03	0.09 *	0.03	
Children < 6	0.07	0.07	0.08	0.07	-0.03	0.06	-0.15 *	0.08	
Children < 14	-0.06	0.05	-0.05	0.05	-0.01	0.04	-0.02	0.05	
Short-time work	0.01	0.03	0.01	0.03	0.01	0.02	-0.02	0.03	
7) Business management & organization									

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Intercept	0.11	0.23	0.60 *	0.26	0.90 ***	0.23	0.29	0.29	
Δ Use of NDT	-0.03	0.05	0.04	0.06	-0.09 +	0.05	0.07	0.07	
Telework	0.01 +	0.00	0.00	0.00	0.01 +	0.00	0.00	0.01	
Job quality 2019–2020	-0.47 ***	0.03	-0.50 ***	0.03	-0.51 ***	0.03	-0.48 ***	0.03	
Man	0.00	0.01	0.00	0.02	-0.01	0.01	0.03	0.02	
University degree	-0.01	0.01	-0.03	0.02	0.00	0.01	0.02	0.02	
Age	0.01	0.01	-0.01	0.01	-0.02 *	0.01	0.00	0.01	
Age ²	0.00	0.00	0.00	0.00	0.00 *	0.00	0.00	0.00	
Full-time work	-0.05 ***	0.01	-0.08 ***	0.02	0.01	0.01	0.00	0.02	
Children < 6	0.01	0.03	0.06 +	0.03	-0.05 +	0.03	-0.03	0.04	
Children < 14	0.02	0.02	-0.01	0.02	0.03 +	0.02	0.01	0.03	
Short-time work	0.01	0.02	0.01	0.02	0.01	0.02	0.00	0.02	
8) Health care, education, teaching									
Intercept	0.35	0.26	0.65 *	0.26	0.47 *	0.22	-0.08	0.29	
Δ Use of NDT	0.03	0.05	0.04	0.05	-0.01	0.04	0.15 **	0.06	
Telework	0.02 ***	0.01	0.02 **	0.01	-0.00	0.00	0.02 ***	0.01	
Job quality 2019–2020	-0.44 ***	0.03	-0.48 ***	0.03	-0.56 ***	0.03	-0.56 ***	0.03	
Man	0.00	0.02	0.02	0.02	0.03 +	0.02	-0.04 +	0.02	
University degree	-0.02	0.02	-0.00	0.02	-0.00	0.01	0.03	0.02	

	Comf. work. hours		Reconciliation		Autonomy		Information overload					
	β	SE	β	SE	β	SE	β	SE				
Age	-0.00	0.01	-0.02	+	0.01	-0.00	0.01	0.01	0.01			
Age ²	0.00	0.00	0.00	*	0.00	0.00	0.00	-0.00	0.00			
Full-time work	-0.02	0.02	-0.05	**	0.02	-0.00	0.01	0.04	*	0.02		
Children < 6	0.03	0.03	0.00		0.03	-0.00	0.03	-0.03		0.04		
Children < 14	-0.02	0.02	0.06	*	0.02	0.02	0.02	0.00		0.03		
Short-time work	0.00	0.00	0.01		0.02	0.04	0.02	0.04	*	0.02		
9) Humanities, social sciences, economics, arts												
Intercept	0.08	0.56	0.34		0.63	-0.02	0.47	0.35		0.82		
Δ Use of NDT	0.15	0.16	0.22		0.18	-0.08	0.13	0.07		0.24		
Telework	-0.01	0.01	0.02		0.01	0.02	+	0.01	0.01	0.02		
Job quality 2019–2020	-0.43	***	0.07	-0.45	***	0.08	-0.59	***	0.07	-0.49	***	0.10
Man	-0.02	0.04	-0.01		0.05	0.04		0.03	0.07		0.06	
University degree	-0.00	0.04	-0.01		0.02	-0.04		0.03	-0.12	*	0.06	
Age	0.01	0.02	-0.00		0.02	0.02		0.02	-0.00		0.03	
Age ²	-0.00	0.00	0.00		0.00	-0.00		0.00	0.00		0.00	
Full-time work	-0.05	0.05	-0.10	+	0.06	-0.05		0.04	0.10		0.07	
Children < 6	0.01	0.09	0.04		0.10	-0.02		0.07	0.02		0.13	
Children < 14	0.07	0.06	-0.00		0.06	-0.08		0.05	-0.05		0.08	
Short-time work	-0.03	0.05	-0.10	+	0.06	0.02		0.04	0.01		0.08	

20 Note: Significance levels: *** p < .001, ** p < .01, * p < .05, + p < .1. Source: NEPS SC6 SUF 13.00, wave 2019–2020 and 2020–2021.

21 **Robustness Checks**

22 We estimated various model specifications to validate our findings. First, as the statutory retirement age in Germany was
23 65 in 2020, we excluded all older individuals from our analysis sample to focus only on regularly employed workers. Thus,
24 we examine whether the results are driven primarily by older employees working alongside retirement who differ from
25 younger employees, especially regarding digitalization. In the restricted sample ($N = 3,118$), workplace digitalization and
26 all job quality indicators differ across occupational fields. However, apart from a few variations, the restricted and the
27 full sample does not differ regarding the change in digitalization and job qualities over the year. Additionally, the findings
28 from the change score models were quite similar between the two samples. There is only a variation in logistics/security
29 (OF 5) – the altered use of NDT is not associated with an increased information overload in the restricted sample (Table
30 A7–A9).

31 Second, we exchanged our main predictor, adding a new aspect of digitalization to the analyses. Instead of the usage
32 index, which captures the use of NDT at work, we analyzed a variable that records how digitalized respondents assessed
33 their workplaces. The variable thus captures whether participants subjectively perceive a change in digitization at the
34 workplace. We again ran all analyses with this indicator for a direct digitalization assessment. The results of the ANOVA
35 ($F(8, 485.93) = 71.01, p < .001$) and t-tests were similar to those of the initial operationalization. Only in logistics/security
36 (OF 5) and trade (OF 6) was no significant change observed in digitalization over the year when participants directly
37 assessed their workplace digitalization. We reproduced most of the findings regarding the change score models.
38 Regarding the differences in agriculture (OF 1), the change in digitalization did not influence the change in comfortable
39 working hours and work-family reconciliation. In contrast, digitalization is linked to increased autonomy in production
40 (OF 2) and information overload in business management (OF 7) (Table A10–A11).

41 Next, to investigate job quality trends over a longer period—especially before the Covid-19 pandemic—we looked at the
42 means of job quality since 2018–2019 (except for information overload, which was unavailable before 2019–2020). This
43 indicates whether the observed declines in most job quality indicators between 2019–2020 and 2020–2021 resulted from
44 the pandemic or whether downward trends in job quality existed before the pandemic. Comfortable working hours and
45 work-family reconciliation increased, and autonomy decreased from 2018–2019 to 2019–2020. Interestingly, all three
46 indicators almost returned to their initial level in 2020–2021. Hence, before the pandemic, most job qualities followed
47 an upward trend while they dipped during the pandemic (Figure A1).

48 Finally, based on our data, it is difficult to tell whether job quality changed due to the pandemic's impact on most people's
49 everyday lives or advancing digitalization. To address this, we performed additional analyses after splitting the
50 respondents into two groups according to their occupational field with or without changes in digitalization. We ran t tests
51 with repeated measures to investigate the changes in job quality between 2019–2020 and 2020–2021 for both groups.
52 Those in occupational fields with altered digitalization also experienced significant changes in all job qualities. However,
53 those without changes in digitalization only experienced significant decreases in work-family reconciliation and increases

54 in information overload. This finding supports our assumption that altered job quality may be related to advancing
 55 digitalization. However, the group with changes in digitalization was larger (N = 2,779) than the group without (N = 471),
 56 potentially influencing the significance levels of these results (Table A12).

57 **Table A7.** Main working age sample (< 66 years) – Do occupational fields differ in job quality and digitalization?

	ANOVA
Comfortable working hours	F (8, 448.67) = 13.41, $p < .001$
Work-family reconciliation	F (8, 449.56) = 9.65, $p < .001$
Autonomy	F (8, 450.15) = 5.25, $p < .001$
Information overload	F (8, 3109) = 14.04, $p < .001$
Use of NDT	F (8, 446.44) = 60.70, $p < .001$

58 Source: NEPS SC6 SUF 13.00, wave 2019–2020.

59

60 **Table A8.** Main working age sample (< 66 years) – Did job quality and digitalization change?

	Comf. work. hours	Reconciliation	Autonomy	Information overload	Use of NDT
Overall	t(3117) = 4.37, <i>p</i> <.001	t(3117) = 12.63, <i>p</i> <.001	t(3117) = -5.21, <i>p</i> <.001	t(3117) = -8.90, <i>p</i> <.001	t(3117) = -8.59, <i>p</i> <.001
1) Agriculture	t(35) = 0.58, <i>p</i> =.5627	t(35) = 1.14, <i>p</i> =.2626	t(35) = 0, <i>p</i> =1	t(35) = -0.74, <i>p</i> =.4638	t(35) = -1.83, <i>p</i> =.0764
2) Production	t(490) = 2.67, <i>p</i> =.0078	t(490) = 4.63, <i>p</i> <.001	t(490) = -2.73, <i>p</i> =.0065	t(490) = -2.57, <i>p</i> = .0105	t(490) = -4.36, <i>p</i> <.001
3) Construction	t(125) = 1.33, <i>p</i> =.1862	t(125) = 2.21, <i>p</i> =.0288	t(125) = -2.92, <i>p</i> =.0041	t(125) = -1.47, <i>p</i> =.1432	t(125) = -1.91, <i>p</i> =.0591
4) Science, ICT	t(192) = 0.72, <i>p</i> =.4703	t(192) = 3.02, <i>p</i> =.0029	t(192) = 0.85, <i>p</i> =.3960	t(192) = -0.87, <i>p</i> =.3854	t(192) = -1.28, <i>p</i> =.2020
5) Logistics, Security	t(236) = 0.71, <i>p</i> =.4807	t(236) = 2.23, <i>p</i> =.0267	t(236) = -4.19, <i>p</i> <.001	t(236) = -3.30, <i>p</i> =.0011	t(236) = -2.49, <i>p</i> =.0136
6) Trade	t(266) = 0.91, <i>p</i> =.3631	t(266) = 2.92, <i>p</i> =.0039	t(266) = -1.79, <i>p</i> =.0741	t(266) = -1.58, <i>p</i> =.1161	t(266) = -2.96, <i>p</i> =.0034
7) Business management	t(846) = 2.78, <i>p</i> =.0055	t(846) = 6.14, <i>p</i> <.001	t(846) = -0.08, <i>p</i> =.9342	t(846) = -3.65, <i>p</i> <.001	t(846) = -2.59, <i>p</i> =.0098
8) Health, education	t(824) = 1.97, <i>p</i> =.0490	t(824) = 9.25, <i>p</i> <.001	t(824) = -3.52, <i>p</i> <.001	t(824) = -6.77, <i>p</i> <.001	t(824) = -5.52, <i>p</i> <.001
9) Social sciences	t(95) = -0.67, <i>p</i> =.5030	t(95) = 0.55, <i>p</i> =.5812	t(95) = -0.63, <i>p</i> =.5315	t(95) = -2.55, <i>p</i> =.0125	t(95) = -0.59, <i>p</i> =.5581

61 Source: NEPS SC6 SUF 13.00, wave 2019–2020 and 2020–2021.

62 **Table A9.** Main working age sample (< 66 years) – Is change in digitalization associated with change in job quality?

	Comf. work. hours		Reconciliation		Autonomy		Information overload			
	β	SE	β	SE	β	SE	β	SE		
Overall										
Intercept	0.38 *	0.15	0.44 **	0.16	0.57 ***	0.14	0.16	0.18		
Δ Use of NDT	0.00	0.03	0.02	0.03	-0.03	0.02	0.13 ***	0.03		
Telework	0.02 ***	0.00	0.02 ***	0.00	0.00	0.00	0.02 ***	0.00		
Job quality 2019–2020	-0.44 ***	0.01	-0.47 ***	0.01	-0.54 ***	0.01	-0.49 ***	0.02		
Man	-0.00	0.01	0.01	0.01	0.00	0.01	-0.01	0.01		
University degree	-0.01	0.01	-0.01	0.01	0.00	0.01	0.02 *	0.01		
Age	-0.00	0.01	-0.00	0.01	-0.01	0.01	0.00	0.01		
Age ²	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Full-time work	-0.04 ***	0.01	-0.07 ***	0.01	0.01	0.01	0.03 **	0.01		
Children < 6	0.02	0.02	0.02	0.02	0.01	0.02	-0.01	0.02		
Children < 14	-0.00	0.01	0.00	0.01	0.00	0.01	0.02	0.01		
Short-time work	0.01	0.01	0.01	0.01	0.02 *	0.01	-0.02 *	0.01		
1) Agriculture, forestry, farming, gardening										
Intercept	-0.41	2.26	0.08	1.85	-0.25	1.49	-0.58	2.63		
Δ Use of NDT	-0.52 *	0.22	-0.42 *	0.19	0.08	0.16	0.30	0.26		
Telework	0.01	0.03	0.02	0.02	-0.00	0.02	0.04	0.04		

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Job quality 2019–2020	-0.67 ***	0.15	-0.64 ***	0.15	-0.42 ***	0.11	-0.56 *	0.22	
Man	-0.00	0.11	0.02	0.09	-0.03	0.07	-0.12	0.13	
University degree	0.10	0.11	0.00	0.09	0.02	0.08	0.01	0.14	
Age	0.04	0.08	0.02	0.07	0.03	0.06	0.02	0.10	
Age ²	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	
Full-time work	-0.09	0.10	-0.09	0.08	-0.03	0.07	0.14	0.12	
Children < 6	-0.26	0.22	-0.28	0.18	-0.11	0.15	-0.18	0.26	
Children < 14	-0.06	0.24	-0.00	0.19	0.02	0.16	0.31	0.28	
Short-time work	0.07	0.15	0.01	0.12	-0.07	0.10	-0.10	0.17	
2) Production, processing of raw materials									
Intercept	1.12 **	0.41	0.76 +	0.41	0.58 +	0.34	-0.22	0.43	
Δ Use of NDT	0.05	0.08	0.10	0.08	-0.06	0.06	0.03	0.08	
Telework	0.03 ***	0.01	0.02 **	0.01	0.00	0.01	0.02 *	0.01	
Job quality 2019–2020	-0.49 ***	0.04	-0.52 ***	0.04	-0.56 ***	0.03	-0.52 ***	0.04	
Man	0.01	0.03	0.02	0.03	-0.00	0.03	0.08 *	0.03	
University degree	-0.02	0.02	0.02	0.02	0.03	0.02	0.04 +	0.03	
Age	-0.03 *	0.02	-0.02	0.02	-0.01	0.01	0.01	0.02	
Age ²	0.00 *	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	
Full-time work	-0.03	0.03	-0.12 ***	0.03	0.01	0.03	0.03	0.04	

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Children < 6	0.00	0.04	-0.07	0.04	0.07 +	0.04	0.06	0.05	
Children < 14	0.01	0.03	0.03	0.03	-0.02	0.03	0.02	0.03	
Short-time work	0.02	0.02	0.02	0.02	0.02	0.02	-0.02	0.02	
3) Construction, architecture, surveying									
Intercept	-0.91	0.88	-0.81	0.95	0.62	0.67	-0.55	1.26	
Δ Use of NDT	-0.04	0.15	-0.12	0.16	0.11	0.11	0.37 +	0.21	
Telework	0.00	0.02	-0.01	0.02	-0.01	0.01	-0.01	0.02	
Job quality 2019–2020	-0.35 ***	0.07	-0.34 ***	0.07	-0.45 ***	0.07	-0.54 ***	0.09	
Man	0.03	0.05	0.10 +	0.06	-0.04	0.04	-0.03	0.08	
University degree	-0.01	0.04	-0.02	0.05	-0.02	0.03	0.09	0.06	
Age	0.04	0.03	0.05	0.04	-0.01	0.03	0.03	0.05	
Age ²	-0.00	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	
Full-time work	-0.07	0.05	-0.14 *	0.06	-0.02	0.04	-0.03	0.07	
Children < 6	0.16	0.11	0.04	0.12	0.15 +	0.08	0.04	0.16	
Children < 14	0.04	0.08	0.03	0.09	-0.02	0.06	-0.00	0.12	
Short-time work	0.01	0.05	-0.02	0.06	-0.01	0.04	-0.03	0.08	
4) Science, ICT									
Intercept	1.36 **	0.49	0.65	0.55	0.78	0.53	0.48	0.62	
Δ Use of NDT	0.06	0.09	-0.09	0.10	-0.05	0.10	0.20 +	0.12	

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Telework	0.01	0.01	0.02 +	0.01	-0.00	0.01	0.02 *	0.01	
Job quality 2019–2020	-0.53 ***	0.06	-0.45 ***	0.06	-0.59 ***	0.07	-0.46 ***	0.06	
Man	-0.01	0.03	-0.00	0.04	0.02	0.04	-0.05	0.04	
University degree	-0.01	0.03	-0.01	0.03	-0.00	0.03	-0.03	0.03	
Age	-0.04 +	0.02	-0.02	0.02	-0.02	0.02	-0.02	0.03	
Age ²	0.00 *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Full-time work	-0.00	0.00	0.02	0.04	0.06	0.04	0.01	0.05	
Children < 6	0.01	0.06	-0.02	0.06	0.04	0.06	0.09	0.07	
Children < 14	0.01	0.06	-0.05	0.04	-0.00	0.04	0.04	0.05	
Short-time work	-0.06	0.03	-0.02	0.04	0.01	0.04	-0.06	0.05	
5) Traffic, logistics, security									
Intercept	0.05	0.68	1.27 +	0.70	0.21	0.58	-1.02	0.69	
Δ Use of NDT	-0.08	0.11	-0.09	0.12	0.03	0.10	0.19	0.12	
Telework	0.04 *	0.02	0.05 **	0.02	0.02	0.01	0.02	0.02	
Job quality 2019–2020	-0.54 ***	0.05	-0.49 ***	0.05	-0.58 ***	0.05	-0.42 ***	0.06	
Man	-0.03	0.04	-0.05	0.04	-0.05	0.04	0.01	0.04	
University degree	-0.04	0.06	-0.01	0.06	0.03	0.05	-0.06	0.06	
Age	0.01	0.03	-0.04	0.03	0.01	0.02	0.04	0.03	
Age ²	-0.00	0.00	0.00	0.00	-0.00	0.00	-0.00	0.00	

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Full-time work	-0.09 +	0.04	-0.09 +	0.05	0.02	0.04	0.08	0.05	
Children < 6	0.07	0.08	0.10	0.08	0.09	0.07	0.05	0.08	
Children < 14	0.04	0.05	0.05	0.05	0.01	0.04	0.02	0.05	
Short-time work	0.06	0.04	0.04	0.04	0.05	0.03	0.02	0.04	
6) Purchasing, sales, trading, tourism									
Intercept	-0.35	0.63	0.11	0.62	0.99 +	0.56	0.59	0.66	
Δ Use of NDT	-0.01	0.10	-0.07	0.10	0.05	0.09	0.19 +	0.10	
Telework	0.03 **	0.01	0.02 *	0.01	0.01	0.01	0.03 **	0.01	
Job quality 2019–2020	-0.40 ***	0.05	-0.43 ***	0.05	-0.56 ***	0.05	-0.51 ***	0.05	
Man	0.01	0.03	0.00	0.03	-0.02	0.03	-0.03	0.04	
University degree	0.01	0.04	0.01	0.03	-0.01	0.03	0.06	0.04	
Age	0.02	0.02	0.01	0.02	-0.02	0.02	-0.01	0.03	
Age ²	-0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	
Full-time work	-0.05	0.03	-0.10 **	0.03	0.01	0.03	0.09 *	0.03	
Children < 6	0.09	0.07	0.08	0.07	-0.04	0.06	-0.15 +	0.08	
Children < 14	-0.06	0.05	-0.05	0.05	-0.01	0.04	-0.02	0.05	
Short-time work	0.01	0.03	0.01	0.03	0.01	0.02	-0.01	0.03	
7) Business management & organization									
Intercept	-0.04	0.28	0.21	0.32	0.90 **	0.28	0.44	0.35	

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Δ Use of NDT	-0.01	0.05	0.06	0.06	-0.08	0.05	0.05	0.07	
Telework	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.01	
Job quality 2019–2020	-0.46 ***	0.03	-0.50 ***	0.03	-0.50 ***	0.03	-0.48 ***	0.03	
Man	0.00	0.02	-0.01	0.02	-0.01	0.02	0.02	0.02	
University degree	-0.01	0.01	-0.02	0.02	0.00	0.01	0.03	0.02	
Age	0.01	0.01	0.01	0.01	-0.02 +	0.01	-0.01	0.01	
Age ²	-0.00	0.00	-0.00	0.00	0.00 +	0.00	0.00	0.00	
Full-time work	-0.05 ***	0.02	-0.08 ***	0.02	0.01	0.01	-0.00	0.02	
Children < 6	0.01	0.03	0.06 +	0.03	-0.05 +	0.03	-0.03	0.04	
Children < 14	0.02	0.02	-0.02	0.02	0.04 +	0.02	0.01	0.03	
Short-time work	0.01	0.02	0.01	0.02	0.00	0.02	0.01	0.02	
8) Health care, education, teaching									
Intercept	0.65 *	0.31	0.57 +	0.32	0.35	0.27	0.12	0.36	
Δ Use of NDT	0.04	0.05	0.05	0.05	-0.02	0.04	0.16 **	0.06	
Telework	0.02 ***	0.01	0.01 **	0.01	-0.00	0.00	0.02 ***	0.01	
Job quality 2019–2020	-0.44 ***	0.03	-0.48 ***	0.03	-0.56 ***	0.03	-0.57 ***	0.03	
Man	0.00	0.02	0.01	0.02	0.03 +	0.02	-0.04 +	0.02	
University degree	-0.02	0.02	-0.00	0.02	-0.01	0.02	0.04 +	0.02	
Age	-0.01	0.01	-0.01	0.01	0.00	0.01	0.00	0.01	

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Age ²	0.00	0.00	0.00	0.00	-0.00	0.00	-0.00	0.00	
Full-time work	-0.02	0.02	-0.05 **	0.02	0.00	0.01	0.04 +	0.02	
Children < 6	0.02	0.03	-0.00	0.03	-0.00	0.03	-0.04	0.04	
Children < 14	-0.01	0.02	0.05 *	0.02	0.01	0.02	0.00	0.03	
Short-time work	-0.00	0.02	0.02	0.03	0.04 .	0.02	-0.06 *	0.03	
9) Humanities, social sciences, economics, arts									
Intercept	0.37	0.70	0.24	0.83	-0.40	0.62	1.34	1.09	
Δ Use of NDT	0.17	0.16	0.18	0.19	-0.10	0.14	0.08	0.25	
Telework	-0.01	0.01	0.02 +	0.01	0.02 +	0.01	0.01	0.02	
Job quality 2019–2020	-0.38 ***	0.07	-0.45 ***	0.08	-0.57 ***	0.07	-0.48 ***	0.10	
Man	-0.01	0.04	-0.01	0.05	0.04	0.04	0.08	0.06	
University degree	-0.01	0.04	-0.03	0.05	-0.05	0.03	-0.11	0.06	
Age	-0.00	0.03	0.00	0.03	0.03	0.02	-0.04	0.04	
Age ²	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	
Full-time work	-0.04	0.05	-0.10 +	0.06	-0.05	0.04	0.08	0.07	
Children < 6	0.03	0.08	0.06	0.10	-0.01	0.07	0.01	0.13	
Children < 14	0.03	0.06	-0.03	0.07	-0.09	0.05	-0.03	0.09	
Short-time work	-0.02	0.05	-0.09 +	0.06	0.10 *	0.05	0.01	0.08	

63 Note: Significance levels: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p < .1$. Source: NEPS SC6 SUF 13.00, wave 2019–2020 and 2020–2021.

64 **Table A10.** Alternative digitalization indicator – Did the assessment of workplace digitalization change?

	Assessment of workplace digitalization
Overall	$t(3249) = -9.60, p < .001$
1) Agriculture	$t(39) = 0.15, p = .8782$
2) Production	$t(499) = -3.08, p = .0022$
3) Construction	$t(131) = -1.60, p = .1122$
4) Science, ICT	$t(197) = -0.82, p = .4107$
5) Logistics, Security	$t(251) = -1.52, p = .1291$
6) Trade	$t(282) = -1.94, p = .0530$
7) Business management	$t(883) = -7.38, p < .001$
8) Health, education	$t(859) = -5.47, p < .001$
9) Social sciences	$t(100) = -0.92, p = .3614$

65 Source: NEPS SC6 SUF 13.00, wave 2019–2020 and 2020–2021.

66 **Table A11.** Alternative digitalization indicator – Is change in the assessment of workplace digitalization associated with change in job quality?

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Overall									
Intercept	0.28 *	0.13	0.52 ***	0.13	0.56 ***	0.11	0.17	0.15	
Δ Assessment of									
workpl. digitalization	0.00	0.01	0.00	0.02	0.00	0.01	0.14 ***	0.02	
Telework	0.02 ***	0.00	0.02 ***	0.00	0.00	0.00	0.01 ***	0.00	
Job quality 2019–2020	-0.45 ***	0.01	-0.47 ***	0.01	-0.55 ***	0.01	-0.48 ***	0.01	
Man	-0.00	0.01	0.01	0.01	0.00	0.01	-0.00	0.01	
University degree	-0.01	0.01	-0.01	0.01	0.00	0.01	0.02 +	0.01	
Age	0.00	0.00	-0.01 +	0.01	-0.01	0.00	0.00	0.01	
Age ²	0.00	0.00	0.00 *	0.00	0.00	0.00	0.00	0.00	
Full-time work	-0.04 ***	0.01	-0.07 ***	0.01	0.00	0.01	0.03 **	0.01	
Children < 6	0.02	0.02	0.02	0.02	0.01	0.02	-0.00	0.02	
Children < 14	-0.00	0.01	0.01	0.01	0.00	0.01	0.02	0.01	
Short-time work	0.01	0.01	0.01	0.01	0.02 *	0.01	-0.03 *	0.01	
1) Agriculture, forestry, farming, gardening									
Intercept	0.71	1.82	0.53	1.51	-1.08	1.21	-1.45	2.03	
Δ Assessment of									
workpl. digitalization	-0.12	0.16	-0.06	0.13	0.06	0.10	0.03	0.17	

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Telework	0.01	0.02	0.02	0.02	-0.02	0.02	0.03	0.03	
Job quality 2019–2020	-0.61 ***	0.16	-0.53 **	0.16	-0.46 ***	0.11	-0.60 **	0.20	
Man	0.06	0.10	0.03	0.08	-0.09	0.06	-0.13	0.11	
University degree	0.06	0.11	-0.04	0.09	0.08	0.07	0.02	0.13	
Age	-0.00	0.07	0.00	0.05	0.06	0.04	0.05	0.07	
Age ²	0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	
Full-time work	-0.13	0.09	-0.05	0.08	-0.07	0.06	0.19 +	0.10	
Children < 6	-0.29	0.22	-0.26	0.19	-0.13	0.15	-0.18	0.25	
Children < 14	-0.11	0.23	-0.08	0.19	0.11	0.15	0.37	0.25	
Short-time work	0.06	0.13	0.05	0.11	-0.15 +	0.08	-0.11	0.14	
2) Production, processing of raw materials									
Intercept	1.11 **	0.38	0.52	0.38	0.48	0.32	-0.02	0.40	
Δ Assessment of									
workpl. digitalization	0.01	0.04	0.02	0.04	0.07 *	0.03	0.06	0.04	
Telework	0.03 ***	0.01	0.02 **	0.01	0.00	0.01	0.01 *	0.13	
Job quality 2019–2020	-0.49 ***	0.04	-0.52 ***	0.04	-0.57 ***	0.03	-0.51 ***	0.04	
Man	0.01	0.03	0.02	0.03	-0.00	0.03	0.07 *	0.03	
University degree	-0.02	0.02	0.02	0.02	0.03	0.02	0.04 +	0.02	
Age	-0.03 *	0.01	-0.01	0.02	-0.01	0.01	0.01	0.02	

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Age ²	0.00 *	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	
Full-time work	-0.04	0.03	-0.11 ***	0.03	0.02	0.03	0.02	0.03	
Children < 6	0.00	0.04	-0.07	0.04	0.08 *	0.04	0.06	0.05	
Children < 14	0.01	0.03	0.03	0.03	-0.02	0.03	0.02	0.03	
Short-time work	0.02	0.02	0.02	0.02	0.02	0.02	-0.03	0.02	
3) Construction, architecture, surveying									
Intercept	-0.70	0.71	0.10	0.78	0.27	0.63	-0.46	1.02	
Δ Assessment of									
workpl. digitalization	-0.06	0.08	-0.04	0.09	0.04	0.07	0.22 +	0.12	
Telework	0.01	0.01	-0.01	0.02	-0.01	0.01	-0.01	0.02	
Job quality 2019–2020	-0.34 ***	0.07	-0.33 ***	0.07	-0.48 ***	0.08	-0.56 ***	0.09	
Man	0.03	0.05	0.11 +	0.06	-0.05	0.05	-0.02	0.07	
University degree	-0.01	0.04	-0.01	0.04	-0.06	0.04	0.07	0.06	
Age	0.03	0.03	0.01	0.03	0.01	0.02	0.03	0.04	
Age ²	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	
Full-time work	-0.07	0.05	-0.14 *	0.05	-0.04	0.04	-0.05	0.07	
Children < 6	0.16	0.11	0.01	0.12	0.16 +	0.10	0.01	0.16	
Children < 14	0.04	0.08	0.02	0.09	-0.01	0.07	0.04	0.11	
Short-time work	0.01	0.05	-0.02	0.06	-0.01	0.05	-0.05	0.07	

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
4) Science, ICT									
Intercept	1.19 *	0.46	0.38	0.52	0.71	0.49	0.56	0.58	
Δ Assessment of									
workpl. digitalization	0.03	0.07	0.08	0.08	0.05	0.08	0.17 +	0.09	
Telework	0.01	0.01	0.01 +	0.01	-0.00	0.01	0.02 +	0.01	
Job quality 2019–2020	-0.52 ***	0.06	-0.46 ***	0.06	-0.59 ***	0.07	-0.45 ***	0.06	
Man	-0.00	0.03	0.01	0.04	0.03	0.04	-0.08 +	0.04	
University degree	-0.02	0.02	-0.02	0.03	-0.01	0.03	-0.02	0.03	
Age	-0.03 +	0.02	-0.00	0.02	-0.01	0.02	-0.02	0.02	
Age ²	0.00 +	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Full-time work	-0.01	0.04	0.00	0.04	0.06	0.04	0.03	0.05	
Children < 6	0.02	0.06	-0.02	0.06	0.04	0.06	0.09	0.07	
Children < 14	0.00	0.04	-0.06	0.04	-0.01	0.04	0.05	0.05	
Short-time work	-0.07 *	0.03	-0.03	0.04	0.00	0.04	-0.05	0.04	
5) Traffic, logistics, security									
Intercept	-0.24	0.52	0.89 +	0.54	0.11	0.45	-0.22	0.54	
Δ Assessment of									
workpl. digitalization	-0.06	0.06	-0.07	0.06	0.01	0.05	0.22 ***	0.06	
Telework	0.04 **	0.02	0.05 ***	0.02	0.02	0.01	0.02	0.02	

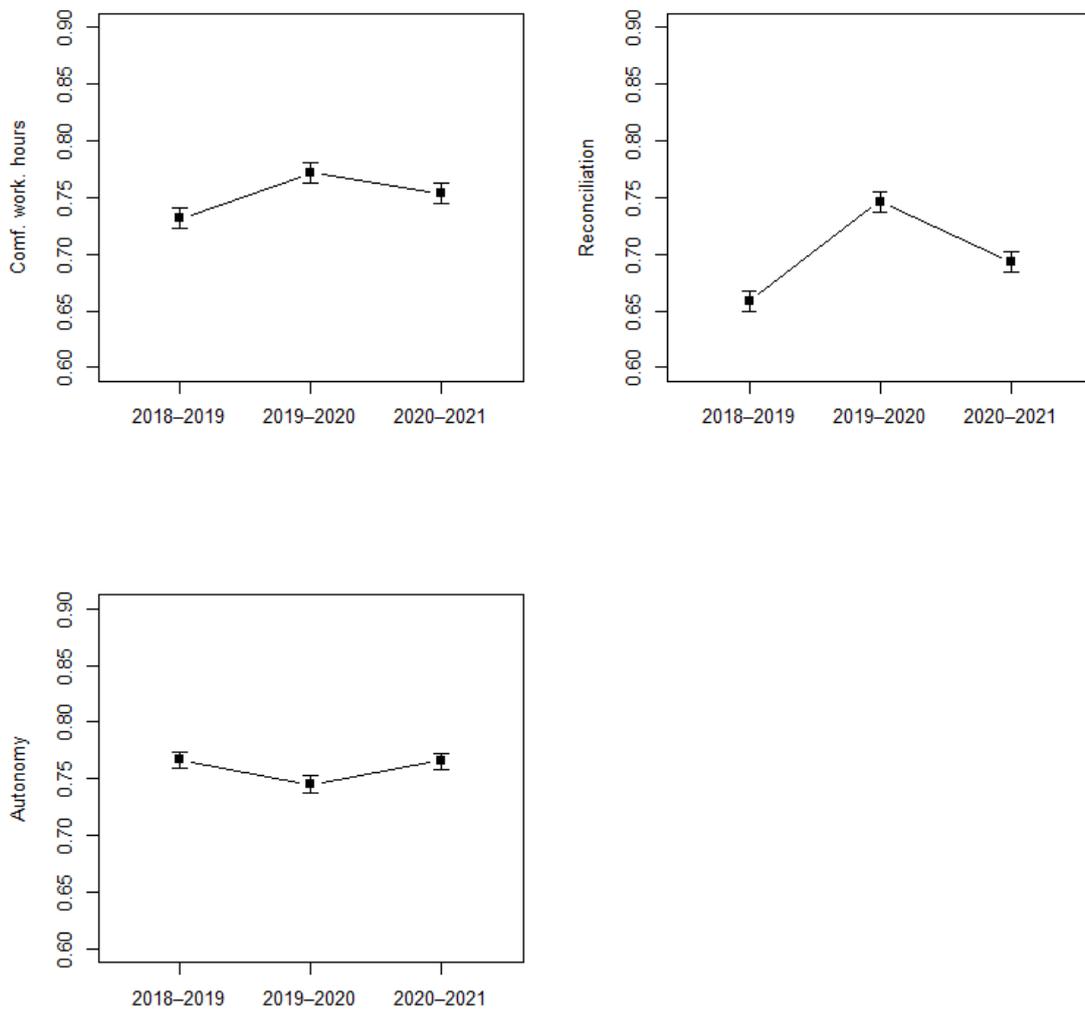
	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Job quality 2019–2020	-0.54 ***	0.05	-0.51 ***	0.05	-0.56 ***	0.04	-0.44 ***	0.06	
Man	-0.05	0.04	-0.05	0.04	-0.04	0.04	0.03	0.04	
University degree	-0.05	0.06	-0.02	0.06	0.04	0.05	-0.04	0.06	
Age	0.02	0.02	-0.02	0.02	0.01	0.02	0.01	0.02	
Age ²	-0.00	0.00	0.00	0.00	-0.00	0.00	-0.00	0.00	
Full-time work	-0.08 +	0.04	-0.09 *	0.04	0.04	0.04	0.06	0.04	
Children < 6	0.08	0.08	0.10	0.08	0.09	0.07	0.05	0.08	
Children < 14	0.04	0.05	0.05	0.05	0.00	0.04	0.03	0.05	
Short-time work	0.07 +	0.04	0.04	0.04	0.06 +	0.03	0.00	0.04	
6) Purchasing, sales, trading, tourism									
Intercept	0.14	0.48	0.19	0.47	1.10 *	0.42	0.92 +	0.49	
Δ Assessment of									
workpl. digitalization	-0.03	0.1	-0.04	0.10	0.05	0.08	0.20 +	0.10	
Telework	0.03 ***	0.01	0.02 *	0.01	0.01	0.01	0.03 ***	0.01	
Job quality 2019–2020	-0.41 ***	0.05	-0.43 ***	0.05	-0.59 ***	0.05	-0.52 ***	0.05	
Man	0.01	0.03	0.00	0.03	-0.02	0.03	-0.03	0.03	
University degree	0.00	0.04	0.01	0.03	-0.01	0.03	0.05	0.04	
Age	0.00	0.02	0.00	0.02	-0.02	0.02	-0.03	0.02	
Age ²	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Full-time work	-0.03	0.03	-0.09 **	0.03	0.01	0.03	0.09 *	0.00	
Children < 6	0.07	0.07	0.08	0.07	-0.03	0.06	-0.15 *	0.08	
Children < 14	-0.06	0.05	-0.05	0.05	-0.01	0.04	-0.02	0.08	
Short-time work	0.01	0.03	0.01	0.03	0.01	0.02	-0.02	0.03	
7) Business management & organization									
Intercept	0.11	0.23	0.60 *	0.26	0.90 ***	0.23	0.29	0.29	
Δ Assessment of									
workpl. digitalization	-0.02	0.05	0.03	0.06	-0.09 +	0.05	0.07	0.07	
Telework	0.01 +	0.00	0.00	0.00	0.01 +	0.00	0.00	0.01	
Job quality 2019–2020	-0.47 ***	0.03	-0.50 ***	0.03	-0.51 ***	0.03	-0.47 ***	0.03	
Man	0.00	0.01	-0.01	0.02	-0.01	0.01	0.03	0.02	
University degree	-0.01	0.01	-0.03	0.02	0.00 *	0.01	0.02	0.02	
Age	0.01	0.01	-0.01	0.01	-0.02 *	0.01	0.00	0.01	
Age ²	0.00	0.00	0.00	0.00	0.00 *	0.00	0.00	0.00	
Full-time work	-0.05 ***	0.01	-0.08 ***	0.02	0.01 +	0.01	0.00	0.02	
Children < 6	0.01	0.03	0.06 +	0.03	-0.05 +	0.03	-0.03	0.04	
Children < 14	0.02	0.02	-0.01	0.02	0.03 +	0.02	0.01	0.03	
Short-time work	0.01	0.02	0.01	0.02	0.01	0.02	0.00	0.02	
8) Health care, education, teaching									

	Comf. work. hours		Reconciliation		Autonomy		Information overload		
	β	SE	β	SE	β	SE	β	SE	
Intercept	0.35	0.26	0.65 *	0.26	0.47 *	0.22	-0.08	0.29	
Δ Assessment of									
workpl. digitalization	0.03	0.05	0.04	0.05	-0.01	0.04	0.15 **	0.06	
Telework	0.02 ***	0.01	0.02 **	0.01	-0.00	0.00	0.02 ***	0.01	
Job quality 2019–2020	-0.45 ***	0.03	-0.48 ***	0.03	-0.57 ***	0.03	-0.56 ***	0.03	
Man	0.00	0.02	0.02	0.02	0.03 +	0.02	-0.04 +	0.02	
University degree	-0.02	0.02	0.00	0.02	0.00	0.02	0.03	0.02	
Age	0.00	0.01	-0.02 +	0.01	0.00	0.01	0.01	0.01	
Age ²	0.00	0.00	0.00 *	0.00	0.00	0.00	0.00	0.00	
Full-time work	-0.02	0.02	-0.05 **	0.02	0.00	0.00	0.01 *	0.02	
Children < 6	0.03	0.03	0.00	0.03	0.00	0.03	-0.03	0.04	
Children < 14	-0.02	0.02	0.06 *	0.02	0.02	0.02	0.00	0.03	
Short-time work	0.00	0.02	0.01	0.02	0.04 +	0.02	-0.06 *	0.03	
9) Humanities, social sciences, economics, arts									
Intercept	0.08	0.56	0.34	0.63	-0.02	0.47	0.35	0.82	
Δ Assessment of									
workpl. digitalization	0.15	0.16	0.22	0.18	-0.08	0.13	0.07	0.24	
Telework	-0.01	0.01	0.02	0.01	0.02 +	0.01	0.01	0.02	
Job quality 2019–2020	-0.43 ***	0.07	-0.45 ***	0.08	-0.59 ***	0.07	-0.50 ***	0.10	

	Comf. work. hours		Reconciliation		Autonomy		Information overload	
	β	SE	β	SE	β	SE	β	SE
Man	-0.02	0.04	-0.01	0.05	0.04	0.03	0.08	0.06
University degree	-0.00	0.04	-0.01	0.04	-0.04	0.03	-0.12 *	0.06
Age	0.01	0.02	0.00	0.02	0.02	0.02	-0.00	0.03
Age ²	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Full-time work	-0.05	0.05	-0.10 +	0.06	-0.05	0.04	0.10	0.07
Children < 6	0.01	0.09	0.03	0.10	-0.02	0.07	0.02	0.13
Children < 14	0.07	0.06	0.00	0.06	-0.08 +	0.05	-0.05	0.08
Short-time work	-0.03	0.05	-0.10 +	0.06	0.02	0.04	0.01	0.08

67 Note: Significance levels: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p < .1$. Source: NEPS SC6 SUF 13.00, wave 2019–2020 and 2020–2021.



68

69 **Figure A1.** Trends in job qualities 2018–2019 to 2020–2021. Source: NEPS SC6 SUF 13.00.

70 **Table A12.** Did occupational fields with and without a change in digitalization differ in their job quality changes?

	Fields with change in Use of NDT	Fields without change in Use of NDT
Comf. work. hours	$t(2778) = 4.27, p < .001, \Delta = 0.02$	$t(470) = 1.17, p = .2430, \Delta = 0.01$
Reconciliation	$t(2778) = 11.85, p < .001, \Delta = 0.05$	$t(470) = 3.72, p < .001, \Delta = 0.04$
Autonomy	$t(2778) = -5.45, p < .001, \Delta = -0.02$	$t(470) = -0.7, p = .4961, \Delta = -0.01$
Information overload	$t(2778) = -9.01, p < .001, \Delta = -0.05$	$t(470) = -2.76, p = .0060, \Delta = -0.04$

71 Note: Fields with change in digitalization = occupational fields 2, 5, 6, 7, and 8; N = 2779; Fields without change in
 72 digitalization = fields 1, 3, 4, 9; N = 471. Source: NEPS SC6 SUF 13.00, wave 2019–2020 and 2020–2021.