

## Appendix A: Documentation of the Existing Questionnaire Landscape

The table below contains the description of existing SOEP items related to the impact channels of digital exposure, which we aim to measure in three domains: (a) AI spread, (b) platform work, (c) digitalized workplace.

<b>Digital exposure: (a) AI spread – no existing items in the SOEP</b>		
<b>Digital exposure: (b) Platform work – no existing items in the SOEP</b>		
<b>Digital exposure: (c) Digitalized workplace</b>		
Question wording	Response Scale	Survey years [variable name] label (+ link to the variable on <a href="https://paneldata.org">paneldata.org</a> )
Sometimes there are changes in the tools and technologies of the workplace - for example, when new technologies, devices, or working or production processes are introduced. What about you? Have there been any changes of this kind in your job in <last year>?	(1) yes (2) no	SOEP 2015-2017 [ <a href="#">plb0595</a> ] Changes Tools And Technologies in Job <a href="#">panel data</a>
How will these changes influence your work over the next two years? Do you expect that ...		
... your health risk ...	(1) will decline (2) will remain the same (3) will increase	SOEP 2015-2017 [ <a href="#">plb0596</a> ] Influence Health Risk in 2 Years
... your work productivity...	(1) will decline (2) will remain the same (3) will increase	SOEP 2015-2017 [ <a href="#">plb0597</a> ] Influence Work Productivity in 2 Years
... the demands for your qualification...	(1) will decline (2) will remain the same (3) will increase	SOEP 2015-2017 [ <a href="#">plb0598</a> ] Influence Demand For Qualification in 2 Years
... the demands for your work performance...	(1) will decline (2) will remain the same (3) will increase	SOEP 2015-2017 [ <a href="#">plb0599</a> ] Influence Work Performance in 2 Years

... your risk of losing your job...	(1) will decline (2) will remain the same (3) will increase	SOEP 2015-2017 [ <a href="#">plb0600</a> ] Influence Risk Losing Job in 2 Years
<b>Usage of digital technologies</b> – no existing items in the SOEP		
<b>Tasks performed on the job</b> – no existing items in the SOEP		
<b>Direct consequences of digital exposure: working time</b>		
How is your working time monitored?	(1) yes, I do it manually (2) yes, it's done through a system (time clock, electronic time-keeping) (3) no	SOEP 2018 [ <a href="#">plb640</a> ] Timekeeping
Why don't you keep track of your working hours?	(1) Trust-based working time (i.e. no compensation for over- or undertime) (2) fixed start and finish times of work	SOEP 2018 [ <a href="#">plb641</a> ] Reason no timekeeping
There are very different working arrangements nowadays. Which of the following applies to your work best?	(1) Fixed start and fixed end the daily working period (2) Business fixed, partly changing working hours per day (3) No formal regulation of working time, regulate working time myself (4) Flextime with working time account and a certain self-determination on the daily working time in this context	SOEP 2003, 2005, 2007, 2009-2019 (annually) <a href="#">[plb0211]</a> Type Of Working Hour Possibilities
Belong to your working time special forms such as standby service, call service or work on call?	(1) yes, standby service (2) yes, call service (3) yes, on call (4) none of the above	SOEP 2011, 2014-2019 (annually) <a href="#">[plb0212]</a> Special type of working hour possibilities: stand-by duty <a href="#">[plb0213]</a> Special type of working hour possibilities: on-call duty <a href="#">[plb0214]</a> Special Type of Working Hour Possibilities: Work on Demand <a href="#">[plb0215]</a> special type of working hour possibilities: no
Do you sometimes have to work in the evenings (after 7:00 p.m.) or at night (after	(1) No, never (2) Yes, every day	SOEP 2005-2019 (biannually) [ <a href="#">plb0205 v2</a> ]

10:00 p.m.)? If so, how often? <ul style="list-style-type: none"> <li>• Evenings (7 to 10 pm)</li> <li>• Nights (10 pm to 6 am)</li> </ul>	(3) Yes, several times a week (4) Yes, on a weekly basis (5) Yes, rarely (as needed)	Work in the evenings or at night
Do you have to work weekends? If so, how often? <ul style="list-style-type: none"> <li>• Saturdays</li> <li>• Sundays</li> </ul>	(1) No, never (2) Yes, every week (3) Yes, every other week (4) Yes, every 3-4 weeks (5) Yes, rarely	SOEP 2005-2019 (biannually), 2012 <a href="#">[plb0218]</a> Working on Saturday <a href="#">[plb0219]</a> Working on Sunday
At what time do you generally start work?	(1) hour, minute (2) varying	SOEP 2002, 2004, 2006, 2008, 2012, 2015, 2017, 2019 <a href="#">[plb0180]</a> Start work hour <a href="#">[plb0181]</a> Start work minute <a href="#">[plb0182]</a> Start work varying
If you could choose your own working hours, taking into account that your income would change according to the number of hours: How many hours would you want to work?	Hours per week	SOEP annually <a href="#">[plb0241 h]</a> Desired weekly work hours
How many days do you usually work per week?	(1) -- days per week (2) not applicable, because <ul style="list-style-type: none"> <li>• The number of days is not fixed</li> <li>• The number of days changes from week to week</li> </ul>	SOEP annually (with rare gaps) <a href="#">[plb0209]</a> Working days per week <a href="#">[plb0210]</a> No contracted working days
How many hours per week are stipulated in your contract (excluding overtime)?	(1) -- hours (2) no set hours	SOEP annually <a href="#">[plb0176 h]</a> Contracted working hours
And how many hours do you generally work per week, including any overtime?	--- hours	SOEP annually <a href="#">[plb0186 h]</a> Actual working hours
Are you entitled to paid breaks?	(1) yes (2) no	SOEP 2017 annually <a href="#">[plb0601]</a> Entitled to paid breaks
How many minutes of paid breaks are you entitled to per working day?	-- minutes	SOEP 2017 annually <a href="#">[plb0602]</a> Minutes paid breaks

How many minutes of that do you usually use?	-- minutes	SOEP 2017 annually <a href="#">[plb0603]</a> Usage paid breaks
Do you work overtime?	(1) yes (2) no (3) not applicable because I am self-employed	SOEP 2017 annually <a href="#">[plb0193]</a> Work overtime
Can you also save your overtime in a working hours account that allows you to take time off for the overtime within a year or more?	(1) yes, by the end of the year (2) yes, within a shorter period of time (3) within a longer period of time	SOEP 2002 annually <a href="#">[plb0194]</a> Overtime Time in Lieu
If you do work overtime, is the work paid, compensated with time off, or not compensated at all?	(1) compensated with time-off (2) partly paid, partly compensated with time-off (3) paid (4) not compensated at all	SOEP annually with gaps 2015-2017 <a href="#">[plb0195 h]</a> Overtime compensation
Have you worked overtime in the last month? If so, how many hours?	(1) yes, -- hours (2) no	SOEP annually <a href="#">[plb0196 h]</a> Overtime last month
Have you used up overtime off in lieu last month? If so, how many?	(1) yes, -- hours (2) no	SOEP annually <a href="#">[plb0483]</a> Take time off for overtime last month
Were you paid overtime in the last month?	(1) yes (2) no	SOEP annually <a href="#">[plb0605]</a> Financial compensation for overtime
<b>Direct consequences of digital exposure: place of work</b>		
How far do you travel to work on a normal workday?	(1) -- km (2) can't say since I work in different locations (3) workplace and dwelling are in the same building or on the same property	SOEP annual with gaps <a href="#">[plb0158]</a> Distance to work, km
And how much time do you usually spend commuting to work on a normal workday?	-- minutes	SOEP biannually <a href="#">[plb0592]</a> Commuting time (minutes)
Does it happen that you do your job at home?	(1) yes (2) no	SOEP 2002, 2009, 2010, 2022, 2014 <a href="#">[plb0095]</a> Work from home
Does it happen that you do your job at home?	(1) yes, daily (2) yes, several times a week (3) every 2-4 weeks (4) rarely	SOEP 2002, 2009-2011, 2014 <a href="#">[plb0096 v1]</a>

If your employer would allow you to temporarily work from home, would you accept this offer?	(1) yes (2) no (3) not possible at my work place	SOEP 2009, 2010, 2011, 2014 <a href="#">[plb0097]</a> Possibility to work from home
<b>Direct consequences of digital exposure: work-life balance</b> – no existing items in the SOEP		
<b>Direct consequences of digital exposure: autonomy</b> – no existing items in the SOEP		
<b>Direct consequences of digital exposure: work intensity, stress</b> – no existing items in the SOEP		
<p>The following statement describe possible situations relating to your work, your job, and your employer. Please indicate to what degree you agree with the following statements.</p> <ul style="list-style-type: none"> <li>• At work, I easily get into time pressure</li> <li>• I often am already thinking about work-related problems when I wake up</li> <li>• When I come home, it is very easy to switch off from thinking about work</li> <li>• Those closest to me say I sacrifice myself too much for my career</li> <li>• Work seldom lets go of me, it stays in my head all evening</li> <li>• If I put off something that needs to be done that day, I can't sleep at night</li> <li>• There is often high time pressure due to the large volume of work</li> <li>• People often interrupt or bother me while I'm working</li> <li>• My workload has increased steadily</li> </ul>	(1) strongly disagree (2) disagree (3) agree (4) strongly agree	<p>SOEP 2006, 2011, 2012, 2016</p> <p><a href="#">[plb0112]</a> working under time pressure</p> <p><a href="#">[plb0113]</a> thinking about work-related problems first thing in the morning</p> <p><a href="#">[plb0114]</a> easy to stop thinking about work</p> <p><a href="#">[plb0115]</a> make sacrifices for career</p> <p><a href="#">[plb0116]</a> always thinking about work</p> <p><a href="#">[plb0117]</a> sleeping problems due to work</p> <p><a href="#">[plb0118]</a> time pressure</p> <p><a href="#">[plb0119]</a> perceived time pressure</p> <p><a href="#">[plb0120]</a> interruption at work</p> <p><a href="#">[plb0122]</a> workload change</p> <p>...</p>

over the last two years • ...		
<b>Indirect consequences: job satisfaction and commitment</b>		
How satisfied are you today with the following areas of your life?	(0) not satisfied at all ... (10) very much satisfied	SOEP annually [ <a href="#">plh0173</a> ] satisfaction with work
<b>Indirect consequences: justice at workplace</b>		
If you were thinking of your present gross earnings, would you say that it is fair, unfairly too high, or unfairly low in relation to your job?	(-5) unfairly too low (-4) (-3) (-2) (-1) (0) fairly (+1) (+2) (+3) (+4) (+5) unfairly too high	SOEP 2017, 2019 [ <a href="#">plh0337 v2</a> ] Fair gross earnings
How high would your gross income have to be in order to be just?	-- euros per month	SOEP 2005, 2009, 2011, 2013, 2015, 2017, 2019 [ <a href="#">plh0138</a> ] Amount of fair gross income
If you think about your present net earnings, would you say that it is fair, unfairly overpriced or unfairly low in relation to your job?	(-5) unfairly too low (-4) (-3) (-2) (-1) (0) fairly (+1) (+2) (+3) (+4) (+5) unfairly too high	SOEP 2018-2019 [ <a href="#">plh0338 v2</a> ] Fair net earnings
How high would your net income have to be in order to be just?	-- euros per month	SOEP 2005, 2009, 2011, 2013, 2015, 2017, 2019 [ <a href="#">plh0140</a> ] Amount of fair gross income