

Appendix

Table A1: Results of the DiD regressions for the full sample (pre-covid and post-covid)

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Working	Employed	Self-employed	Hours worked (if working)	Hours worked (if employed)	Hours worked (if self-employed)
NCD	-0.0081*** (0.0026)	-0.0065** (0.0028)	0.0004 (0.0016)	-0.4026*** (0.1209)	-0.4326*** (0.1222)	-1.0371** (0.4236)
COVID	-0.0078*** (0.0027)	-0.0297*** (0.0028)	-0.0044*** (0.0016)	-8.9688*** (0.1247)	-7.7227*** (0.1263)	-16.9402*** (0.4563)
NCD*COVID	-0.0446*** (0.0030)	-0.0341*** (0.0032)	-0.0103*** (0.0018)	-1.3635*** (0.1422)	-1.2598*** (0.1448)	-2.4483*** (0.5303)
Time	-0.0002 (0.0003)	-0.0002 (0.0003)	-0.0002 (0.0002)	0.7383*** (0.0135)	0.6935*** (0.0137)	0.9028*** (0.0490)
Age	-0.0032*** (0.0002)	-0.0055*** (0.0002)	0.0022*** (0.0001)	-0.0289*** (0.0075)	0.0084 (0.0074)	-0.1642*** (0.0275)
<i>Gender (Reference group: Male)</i>						
Female	-0.0768*** (0.0055)	-0.0229*** (0.0061)	-0.0541*** (0.0038)	-7.2351*** (0.1857)	-6.8922*** (0.1839)	-10.7724*** (0.6336)
<i>Ethnicity (Reference group: non-White)</i>						
White	0.1343*** (0.0073)	0.1327*** (0.0081)	0.0029 (0.0051)	0.7934*** (0.2546)	0.7019*** (0.2518)	1.3513 (0.8369)
<i>Marital status (Reference group: Single or never married)</i>						
Married/ Civil partnership	0.0746*** (0.0044)	0.0618*** (0.0047)	0.0045* (0.0027)	1.4677*** (0.1779)	1.4282*** (0.1754)	1.5676** (0.7302)
Widowed	0.0117 (0.0131)	0.0201 (0.0141)	0.0034 (0.0081)	-0.5517 (0.6385)	-1.5323** (0.6442)	6.7506*** (2.1093)
Separated/ Divorced	0.0745*** (0.0064)	0.0711*** (0.0069)	-0.0051 (0.0040)	2.7197*** (0.2760)	2.3934*** (0.2742)	3.3245*** (1.0722)
<i>Education (Reference group: Less than O/L)</i>						
O/L to A/L	0.0039 (0.0058)	-0.0025 (0.0064)	0.0067* (0.0038)	-2.3954*** (0.2280)	-2.0113*** (0.2256)	-3.0610*** (0.8059)
A/L to College	0.1049*** (0.0076)	0.1003*** (0.0084)	0.0085* (0.0050)	1.0972*** (0.2894)	1.3967*** (0.2857)	-1.7011 (1.0669)
College and above	0.2082*** (0.0058)	0.1923*** (0.0065)	0.0207*** (0.0039)	3.1361*** (0.2183)	3.7534*** (0.2169)	-1.5330** (0.7386)
Having school-age children	0.0225*** (0.0038)	0.0093** (0.0041)	0.0147*** (0.0024)	-1.8346*** (0.1634)	-1.9262*** (0.1618)	-2.2508*** (0.6631)
Constant	0.6834*** (0.0113)	0.6812*** (0.0125)	0.0145* (0.0077)	29.9550*** (0.4267)	28.2856*** (0.4213)	38.4973*** (1.5447)
Observations	171,616	171,616	171,616	129,750	112,442	15,023
Number of respondents	17,067	17,067	17,067	14,748	13,501	2,668

Notes: The table provides the results of six DiD regressions estimated for three employment categories; all types of working, employed and self-employed. The reference period is pre-covid period (US survey wave 5 to 10) and the observed period is the Covid period (US Covid-19 study wave 1 to 9). The dependent variables of the first three regressions are dummy variables that indicate being any kind of working, employed or self-employed. The dependent variables for the last three regressions are the weekly working hours conditional to working in any of the above three categories.

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A2: Results of DiD regressions for heterogeneous time effect

VARIABLES	Probability of work			Weekly work hours		
	(1)	(2)	(3)	(4)	(5)	(6)
	Working	Employed	Self-employed	Hours worked (if working)	Hours worked (if employed)	Hours worked (if self-employed)
NCD	-0.016*** (0.005)	-0.013** (0.005)	-0.002 (0.003)	-0.425* (0.224)	-0.316 (0.225)	-1.061 (0.762)
Time (reference group: Wave 10)						
Wave 5	0.010** (0.004)	0.007* (0.004)	0.003 (0.002)	-0.020 (0.182)	-0.071 (0.181)	1.174* (0.653)
Wave 6	0.012*** (0.004)	0.008* (0.004)	0.004* (0.002)	0.217 (0.181)	0.138 (0.181)	1.351** (0.641)
Wave 7	0.015*** (0.004)	0.014*** (0.004)	0.002 (0.002)	-0.143 (0.178)	-0.156 (0.178)	0.389 (0.640)
Wave 8	0.014*** (0.004)	0.015*** (0.004)	-0.001 (0.002)	-0.183 (0.178)	-0.173 (0.177)	0.030 (0.636)
Wave 9	0.008** (0.004)	0.006 (0.004)	0.002 (0.002)	-0.135 (0.179)	-0.179 (0.179)	0.486 (0.632)
April 2020	-0.025*** (0.004)	-0.043*** (0.004)	-0.006*** (0.002)	-8.675*** (0.187)	-7.378*** (0.189)	-17.103*** (0.667)
May 2020	0.006 (0.004)	-0.014*** (0.005)	-0.004 (0.003)	-7.265*** (0.197)	-6.143*** (0.199)	-14.752*** (0.698)
June 2020	0.005 (0.004)	-0.022*** (0.005)	-0.004 (0.003)	-4.886*** (0.201)	-3.999*** (0.203)	-10.952*** (0.715)
July 2020	0.006 (0.004)	-0.020*** (0.005)	-0.004 (0.003)	-4.576*** (0.203)	-3.832*** (0.204)	-9.220*** (0.725)
Sep 2020	-0.000 (0.005)	-0.026*** (0.005)	-0.004 (0.003)	-0.787*** (0.209)	-0.000 (0.211)	-6.342*** (0.745)
Nov 2020	0.001 (0.005)	-0.026*** (0.005)	-0.001 (0.003)	-1.394*** (0.214)	-0.503** (0.216)	-8.006*** (0.747)
Jan 2021	0.004 (0.005)	-0.021*** (0.005)	-0.004 (0.003)	-2.163*** (0.215)	-1.251*** (0.217)	-9.188*** (0.768)
Mar 2021	-0.005 (0.005)	-0.026*** (0.005)	-0.006** (0.003)	-1.407*** (0.207)	-0.678*** (0.209)	-7.055*** (0.747)
Sep 2021	0.017*** (0.005)	-0.005 (0.005)	-0.007** (0.003)	0.302 (0.207)	0.808*** (0.208)	-3.584*** (0.756)
NCD*Time (reference group: NCD=0 and Time= Wave 10)						
NCD*Wave 5	0.035*** (0.007)	0.035*** (0.007)	0.001 (0.004)	0.494 (0.316)	0.307 (0.317)	0.206 (1.093)
NCD*Wave 6	0.024*** (0.007)	0.025*** (0.007)	0.002 (0.004)	0.479 (0.314)	0.289 (0.315)	0.268 (1.071)
NCD*Wave 7	0.016** (0.007)	0.011 (0.007)	0.007* (0.004)	0.419 (0.307)	0.219 (0.309)	0.392 (1.041)
NCD*Wave 8	-0.005 (0.007)	-0.010 (0.007)	0.006 (0.004)	0.530* (0.306)	0.295 (0.308)	1.113 (1.036)
NCD*Wave 9	-0.004 (0.006)	-0.004 (0.007)	0.000 (0.004)	0.166 (0.303)	-0.069 (0.304)	0.968 (1.023)
NCD*Apr20	-0.028*** (0.006)	-0.019*** (0.007)	-0.007* (0.004)	-0.961*** (0.308)	-1.213*** (0.311)	-1.410 (1.083)
NCD*May20	-0.028*** (0.007)	-0.021*** (0.007)	-0.008** (0.004)	-0.997*** (0.321)	-1.096*** (0.324)	-1.425 (1.119)
NCD*Jun20	-0.031*** (0.007)	-0.024*** (0.007)	-0.007* (0.004)	-1.312*** (0.328)	-1.209*** (0.332)	-3.143*** (1.142)
NCD*Jul20	-0.035*** (0.007)	-0.029*** (0.008)	-0.007* (0.004)	-1.226*** (0.332)	-1.437*** (0.336)	-1.885 (1.168)
NCD*Sep20	-0.037*** (0.007)	-0.028*** (0.008)	-0.012*** (0.004)	-1.041*** (0.341)	-1.185*** (0.346)	-0.822 (1.209)
NCD*Nov20	-0.040*** (0.007)	-0.029*** (0.008)	-0.010** (0.004)	-1.277*** (0.351)	-0.962*** (0.356)	-3.805*** (1.205)
NCD*Jan21	-0.050*** (0.008)	-0.036*** (0.008)	-0.011** (0.005)	-1.154*** (0.355)	-1.055*** (0.359)	-2.564** (1.247)
NCD*Mar21	-0.035*** (0.007)	-0.023*** (0.008)	-0.008* (0.004)	-1.674*** (0.349)	-1.521*** (0.352)	-4.061*** (1.229)
NCD*Sep21	-0.054*** (0.007)	-0.045*** (0.008)	-0.003 (0.004)	-1.570*** (0.345)	-1.663*** (0.349)	-2.259* (1.223)
Age	-0.003*** (0.000)	-0.005*** (0.000)	0.002*** (0.000)	0.007 (0.007)	0.040*** (0.007)	-0.109*** (0.028)
Gender (reference group: Male)						
Female	-0.076*** (0.005)	-0.022*** (0.006)	-0.054*** (0.004)	-7.160*** (0.184)	-6.832*** (0.182)	-10.686*** (0.630)
Ethnicity (reference group: Non-White)						
White	0.132*** (0.007)	0.130*** (0.008)	0.002 (0.005)	0.572** (0.253)	0.518** (0.250)	0.789 (0.832)

Table A2—Results of DiD regressions for heterogeneous time effect: continued

	Probability of work			Weekly work hours		
	(1)	(2)	(3)	(4)	(5)	(6)
Marital Status (reference group: Single or never married)						
Married_cp_livcop	0.073*** (0.004)	0.060*** (0.005)	0.004 (0.003)	1.244*** (0.177)	1.220*** (0.174)	1.187 (0.724)
Widowed	0.012 (0.013)	0.021 (0.014)	0.003 (0.008)	-0.735 (0.634)	-1.660*** (0.639)	6.367*** (2.087)
sep_divorced	0.073*** (0.006)	0.069*** (0.007)	-0.005 (0.004)	2.456*** (0.274)	2.154*** (0.272)	2.773*** (1.062)
Education (reference group: Less than O/L)						
OL_to_AL	0.006 (0.006)	-0.001 (0.006)	0.007* (0.004)	-2.100*** (0.227)	-1.737*** (0.224)	-2.724*** (0.801)
AL_to_college	0.107*** (0.008)	0.102*** (0.008)	0.009* (0.005)	1.399*** (0.287)	1.691*** (0.283)	-1.624 (1.060)
college_above	0.211*** (0.006)	0.195*** (0.006)	0.021*** (0.004)	3.584*** (0.217)	4.181*** (0.216)	-1.325* (0.734)
school_age_children	0.022*** (0.004)	0.009** (0.004)	0.015*** (0.002)	-1.840*** (0.162)	-1.934*** (0.161)	-2.277*** (0.656)
Constant	0.659*** (0.012)	0.659*** (0.013)	0.008 (0.008)	33.978*** (0.452)	32.189*** (0.445)	42.527*** (1.637)
Observations	171,616	171,616	171,616	129,750	112,442	15,023
Number of pidp	17,067	17,067	17,067	14,748	13,501	2,668

Notes: Columns (1),(2) and (3) provide the results of three linear probability models estimated for three employment categories; all working, employed and self-employed. Columns (4),(5) and (6) provide the results of three DiD regressions for weekly working hours based on employment status.

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A3: Sub-sample analysis - Probability of work

	Age categories		Gender		NCD types	
	below 55	55 to 65	Female	Male	Risky NCD	Other NCD
NCD	-0.010*	-0.005	-0.014**	-0.020***	-0.020***	-0.009
	(0.006)	(0.009)	(0.006)	(0.007)	(0.006)	(0.006)
Wave 5	0.014***	0.021**	0.000	0.022***	0.019***	0.014***
	(0.004)	(0.011)	(0.005)	(0.006)	(0.004)	(0.004)
Wave 6	0.017***	0.026***	0.001	0.027***	0.019***	0.015***
	(0.004)	(0.010)	(0.005)	(0.006)	(0.004)	(0.004)
Wave 7	0.017***	0.027***	0.006	0.026***	0.019***	0.017***
	(0.004)	(0.010)	(0.005)	(0.006)	(0.003)	(0.003)
Wave 8	0.017***	0.015	0.008	0.021***	0.014***	0.011***
	(0.004)	(0.009)	(0.005)	(0.006)	(0.003)	(0.003)
Wave 9	0.011***	0.013	0.006	0.010*	0.008**	0.005
	(0.004)	(0.009)	(0.005)	(0.006)	(0.003)	(0.003)
April 2020	-0.033***	0.012	-0.023***	-0.027***	-0.028***	-0.036***
	(0.004)	(0.009)	(0.005)	(0.006)	(0.004)	(0.003)
May 2020	0.004	0.023**	0.006	0.005	0.001	-0.003
	(0.005)	(0.010)	(0.006)	(0.007)	(0.004)	(0.004)
Jun 2020	0.002	0.026***	0.005	0.004	-0.001	-0.006
	(0.005)	(0.010)	(0.006)	(0.007)	(0.004)	(0.004)
Jul 2020	0.003	0.029***	0.009	-0.000	-0.001	-0.005
	(0.005)	(0.010)	(0.006)	(0.007)	(0.004)	(0.004)
Sep 2020	-0.001	0.016	-0.000	-0.000	-0.008**	-0.011***
	(0.005)	(0.010)	(0.006)	(0.007)	(0.004)	(0.004)
Nov 2020	-0.001	0.027***	-0.001	0.005	-0.008*	-0.009**
	(0.005)	(0.010)	(0.006)	(0.007)	(0.004)	(0.004)
Jan 2021	0.006	0.021**	0.000	0.009	-0.007*	-0.009**
	(0.005)	(0.010)	(0.006)	(0.007)	(0.004)	(0.004)
Mar 2021	-0.005	0.017*	-0.009	0.002	-0.011***	-0.014***
	(0.005)	(0.010)	(0.006)	(0.007)	(0.004)	(0.004)
Sep 2021	0.017***	0.035***	0.016***	0.018**	0.007*	0.001
	(0.005)	(0.010)	(0.006)	(0.007)	(0.004)	(0.004)
NCD*Wave 5	0.007	-0.020	0.040***	0.028***	0.010	0.043***
	(0.008)	(0.014)	(0.009)	(0.010)	(0.009)	(0.008)
NCD*Wave 6	-0.001	-0.032**	0.029***	0.018*	0.003	0.034***
	(0.008)	(0.013)	(0.009)	(0.010)	(0.008)	(0.008)
NCD*Wave 7	0.004	-0.042***	0.018**	0.014	0.003	0.022***
	(0.008)	(0.013)	(0.009)	(0.010)	(0.008)	(0.008)
NCD*Wave 8	-0.015**	-0.041***	-0.007	-0.000	-0.014*	0.006
	(0.008)	(0.013)	(0.009)	(0.010)	(0.008)	(0.008)
NCD*Wave 9	-0.010	-0.028**	-0.005	-0.002	-0.014*	0.007
	(0.008)	(0.012)	(0.008)	(0.010)	(0.008)	(0.008)
NCD*April 2020	-0.036***	-0.013	-0.023***	-0.037***	-0.036***	-0.003
	(0.008)	(0.012)	(0.009)	(0.010)	(0.008)	(0.008)
NCD*May 2020	-0.027***	-0.008	-0.026***	-0.030***	-0.028***	-0.011
	(0.008)	(0.013)	(0.009)	(0.011)	(0.008)	(0.009)
NCD*Jun 2020	-0.032***	-0.010	-0.030***	-0.034***	-0.032***	-0.013
	(0.008)	(0.013)	(0.009)	(0.011)	(0.008)	(0.009)
NCD*Jul 2020	-0.038***	-0.008	-0.037***	-0.030***	-0.033***	-0.017*
	(0.008)	(0.013)	(0.009)	(0.011)	(0.008)	(0.009)
NCD*Sep 2020	-0.040***	-0.001	-0.037***	-0.037***	-0.034***	-0.020**
	(0.009)	(0.013)	(0.010)	(0.011)	(0.009)	(0.009)
NCD*Nov 2020	-0.034***	-0.018	-0.036***	-0.045***	-0.033***	-0.025***
	(0.009)	(0.013)	(0.010)	(0.012)	(0.009)	(0.009)
NCD*Jan 2021	-0.040***	-0.024*	-0.043***	-0.061***	-0.042***	-0.033***
	(0.009)	(0.013)	(0.010)	(0.012)	(0.009)	(0.009)
NCD*Mar 2021	-0.024***	-0.007	-0.029***	-0.043***	-0.034***	-0.019**
	(0.009)	(0.013)	(0.010)	(0.011)	(0.009)	(0.009)
NCD*Sep 2021	-0.038***	-0.024*	-0.051***	-0.057***	-0.054***	-0.027***
	(0.009)	(0.013)	(0.010)	(0.011)	(0.009)	(0.009)
Age	0.006***	-0.044***	-0.003***	-0.003***	-0.003***	-0.003***
	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
Gender (Reference group: Male)						
Female	-0.065***	-0.080***	0.575***		-0.078***	-0.076***
	(0.005)	(0.010)	(0.015)		(0.005)	(0.005)
Ethnicity (Reference group: non-White)						
White	0.152***	0.051***	0.155***	0.099***	0.131***	0.132***
	(0.007)	(0.017)	(0.010)	(0.011)	(0.007)	(0.007)
Marital status (Reference group: Single or never married)						
Married/ Civil partnership	0.040***	0.015	0.033***	0.143***	0.074***	0.074***
	(0.004)	(0.014)	(0.006)	(0.007)	(0.004)	(0.004)
Widowed	-0.022	0.022	-0.023	0.074***	0.012	0.012
	(0.020)	(0.021)	(0.016)	(0.025)	(0.013)	(0.013)

Table A3—Results of DiD regressions- Probability of work: sub-sample analysis: continued....

Variable	Age categories		Gender		NCD types	
	below 55	55 to 65	Female	Male	Risky NCD	Other NCD
Separated/ Divorced	0.026*** (0.007)	0.045*** (0.014)	0.051*** (0.008)	0.111*** (0.011)	0.074*** (0.006)	0.073*** (0.006)
Education (Reference group: Less than O/L)						
O/L to A/L	0.032*** (0.006)	0.024* (0.013)	0.018** (0.008)	-0.012 (0.009)	0.005 (0.006)	0.005 (0.006)
A/L to College	0.120*** (0.008)	0.034** (0.016)	0.116*** (0.010)	0.094*** (0.013)	0.107*** (0.008)	0.107*** (0.008)
College and above	0.220*** (0.006)	0.043*** (0.012)	0.232*** (0.008)	0.173*** (0.009)	0.213*** (0.006)	0.213*** (0.006)
Having school-age children	-0.000 (0.004)	-0.100*** (0.017)	0.026*** (0.004)	0.021 (0.017)	0.024*** (0.004)	0.023*** (0.004)
Constant	0.339*** (0.012)	3.220*** (0.066)		0.663*** (0.017)	0.663*** (0.012)	0.662*** (0.012)
Observations	123,577	48,039	103,561	68,055	171,616	171,679
Number of pidp	13,635	6,420	10,172	6,923	17,067	17,069

Notes: The table provides the results of four sub-sample analyses. the dependent variable is the probability of engaging in any type of employment. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A4: Sub-sample analysis - weekly hours worked

	Age categories			Gender		NCD types			Keyworkers (KWs)	
	below 55	55 to 65		Female	Male	Risky NCD	Other NCD		KWs	Non-KWs
NCD	-0.114 (0.257)	-1.198*** (0.459)		-0.524* (0.284)	-0.247 (0.361)	-0.206 (0.273)	-0.558* (0.286)		-0.021 (0.375)	-0.263 (0.346)
Wave 5	0.170 (0.195)	-0.397 (0.499)		-0.227 (0.237)	0.224 (0.282)	0.133 (0.162)	0.013 (0.162)			
Wave 6	0.358* (0.194)	-0.103 (0.490)		0.015 (0.235)	0.444 (0.281)	0.340** (0.161)	0.276* (0.161)			
Wave 7	0.043 (0.191)	-0.636 (0.464)		-0.175 (0.231)	-0.117 (0.278)	-0.007 (0.158)	-0.115 (0.158)			
Wave 8	-0.010 (0.191)	-0.786* (0.451)		-0.317 (0.231)	-0.037 (0.278)	-0.025 (0.157)	-0.132 (0.158)			
Wave 9	0.073 (0.193)	-0.942** (0.446)		-0.247 (0.232)	-0.002 (0.281)	-0.011 (0.158)	-0.194 (0.158)			
April 2020	-8.460*** (0.202)	-9.858*** (0.453)		-7.635*** (0.241)	-10.071*** (0.296)	-8.749*** (0.165)	-9.050*** (0.163)		-3.387*** (0.280)	-13.046*** (0.277)
May 2020	-7.043*** (0.214)	-8.442*** (0.468)		-6.088*** (0.252)	-8.057*** (0.315)	-7.215*** (0.173)	-7.787*** (0.171)		-2.247*** (0.294)	-11.880*** (0.301)
Jun 2020	-4.779*** (0.219)	-5.531*** (0.468)		-4.594*** (0.255)	-5.278*** (0.322)	-5.068*** (0.177)	-5.318*** (0.174)		-0.724** (0.300)	-8.711*** (0.307)
Jul 2020	-4.579*** (0.221)	-4.829*** (0.471)		-4.559*** (0.258)	-4.574*** (0.324)	-4.865*** (0.178)	-4.843*** (0.176)		-2.936*** (0.312)	-5.816*** (0.303)
Sep 2020	-0.510** (0.229)	-2.085*** (0.482)		-0.640** (0.267)	-0.978*** (0.334)	-1.010*** (0.184)	-1.030*** (0.182)		1.043*** (0.320)	-2.255*** (0.312)
Nov 2020	-1.080*** (0.235)	-2.653*** (0.487)		-1.017*** (0.273)	-1.911*** (0.342)	-1.631*** (0.188)	-1.733*** (0.186)		0.969*** (0.329)	-3.175*** (0.318)
Jan 2021	-1.858*** (0.236)	-3.371*** (0.490)		-1.896*** (0.273)	-2.535*** (0.345)	-2.360*** (0.190)	-2.459*** (0.188)		0.453 (0.315)	-5.174*** (0.339)
Mar 2021	-1.210*** (0.227)	-2.239*** (0.481)		-1.243*** (0.265)	-1.623*** (0.330)	-1.724*** (0.184)	-1.769*** (0.182)		0.609** (0.304)	-3.946*** (0.328)
Sep 2021	0.545*** (0.226)	-0.391 (0.491)		0.471* (0.264)	0.096 (0.330)	0.034 (0.183)	-0.087 (0.182)		1.014*** (0.331)	-0.441 (0.306)
NCD*Wave 5	-0.097 (0.363)	0.628 (0.690)		0.771* (0.400)	0.171 (0.509)	0.024 (0.405)	0.801** (0.397)			
NCD*Wave 6	-0.150 (0.361)	0.598 (0.676)		0.531 (0.399)	0.454 (0.504)	0.202 (0.400)	0.622 (0.396)			
NCD*Wave 7	-0.198 (0.354)	0.704 (0.646)		0.497 (0.391)	0.318 (0.495)	0.000 (0.390)	0.704* (0.388)			
NCD*Wave 8	0.149 (0.353)	0.734 (0.633)		0.657* (0.389)	0.386 (0.493)	0.110 (0.388)	0.780** (0.385)			
NCD*Wave 9	-0.409	1.149*		0.242	0.103	-0.454	0.704*			

Table A4-Sub-sample analysis - weekly hours worked continued

	Age categories			Gender		NCD types			Key workers	
	below 55	55 to 65		Female	Male	Risky NCD	Other NCD		KWs	Non-KWs
NCD*April 2020	(0.350) -0.327 (0.357)	(0.620) -0.714 (0.622)		(0.384) -0.767** (0.390)	(0.489) -1.426*** (0.498)	(0.383) -1.426*** (0.371)	(0.378) 0.069 (0.371)		-1.690*** (0.464)	-0.613 (0.463)
NCD*May 2020	-1.006*** (0.375)	0.288 (0.638)		-0.415 (0.405)	-1.961*** (0.521)	-2.104*** (0.386)	0.754* (0.409)		-1.477*** (0.481)	-0.536 (0.494)
NCD*Jun 2020	-0.886** (0.386)	-0.959 (0.641)		-1.149*** (0.413)	-1.633*** (0.533)	-1.565*** (0.395)	-0.343 (0.417)		-1.289*** (0.493)	-1.182** (0.505)
NCD*Jul 2020	-0.849** (0.392)	-0.992 (0.645)		-0.948** (0.420)	-1.692*** (0.538)	-0.837** (0.401)	-1.006** (0.424)		-1.045** (0.508)	-1.603*** (0.505)
NCD*Sep 2020	-0.874** (0.406)	0.293 (0.656)		-0.463 (0.431)	-1.950*** (0.554)	-0.821** (0.413)	-0.733* (0.433)		-1.310** (0.520)	-0.857* (0.519)
NCD*Nov 2020	-0.607 (0.419)	-0.680 (0.666)		-0.950** (0.442)	-1.801*** (0.569)	-1.187*** (0.425)	-0.713 (0.444)		-1.288** (0.533)	-1.499*** (0.532)
NCD*Jan 2021	-0.881** (0.426)	-0.052 (0.672)		-0.941** (0.447)	-1.521*** (0.579)	-1.092** (0.433)	-0.642 (0.451)		-1.198** (0.517)	-1.732*** (0.573)
NCD*Mar 2021	-1.018** (0.418)	-1.215* (0.664)		-1.316*** (0.441)	-2.262*** (0.564)	-1.381*** (0.427)	-1.222*** (0.446)		-1.194** (0.507)	-2.490*** (0.565)
NCD*Sep 2021	-1.095*** (0.410)	-0.797 (0.672)		-1.351*** (0.435)	-1.953*** (0.561)	-1.558*** (0.425)	-0.862** (0.438)		-1.477*** (0.530)	-1.929*** (0.533)
Age	0.180*** (0.009)	-0.837*** (0.043)		0.020** (0.010)	-0.019 (0.011)	0.002 (0.007)	0.002 (0.007)		0.000 (0.015)	-0.010 (0.013)
Gender (Reference group: Male)										
Female	-6.945*** (0.191)	-7.480*** (0.355)				-7.202*** (0.185)	-7.163*** (0.184)		-6.606*** (0.334)	-7.471*** (0.292)
Ethnicity (Reference group: non-White)										
White	1.149*** (0.247)	-1.386** (0.632)		0.120 (0.341)	1.320*** (0.369)	0.561** (0.253)	0.575** (0.253)		1.199*** (0.434)	0.238 (0.383)
Marital status (Reference group: Single or never married)										
Married/ Civil partnership	0.446** (0.179)	-0.590 (0.550)		-0.166 (0.224)	3.612*** (0.283)	1.280*** (0.177)	1.273*** (0.177)		-0.212 (0.405)	1.882*** (0.366)
Widowed	-0.382 (0.928)	0.083 (0.979)		-0.878 (0.741)	-1.416 (1.204)	-0.704 (0.634)	-0.703 (0.634)		-1.430 (1.460)	0.820 (1.518)
Separated/ Divorced	1.709*** (0.305)	1.794*** (0.613)		1.826*** (0.332)	3.247*** (0.480)	2.471*** (0.274)	2.474*** (0.274)		1.044* (0.609)	3.298*** (0.616)
Education (Reference group: Less than O/L)										
O/L to A/L	-1.206*** (0.236)	-1.335*** (0.457)		-2.291*** (0.305)	-1.616*** (0.331)	-2.125*** (0.227)	-2.117*** (0.227)		-0.206 (0.423)	-1.111*** (0.373)
A/L to College	1.963*** (0.301)	0.002 (0.576)		2.052*** (0.363)	0.568 (0.466)	1.385*** (0.288)	1.391*** (0.287)		1.550*** (0.518)	1.468*** (0.514)
College and above	4.457*** (0.225)	-0.555 (0.433)		5.245*** (0.290)	1.160*** (0.320)	3.590*** (0.217)	3.591*** (0.217)		2.318*** (0.398)	4.511*** (0.351)

Table A4-Sub-sample analysis - weekly hours worked continued

	Age categories			Gender		NCD types				Keyworkers	
	below 55	55 to 65		Female	Male	Risky NCD	Other NCD	KWs	Non-KW's		
Having school-age children	-2.672*** (0.164)	-2.509*** (0.795)		-1.799*** (0.165)	1.988*** (0.759)	-1.798*** (0.162)	-1.807*** (0.162)	-2.148*** (0.380)	-2.042*** (0.389)		
Constant	27.230*** (0.478)	87.255*** (2.659)		26.835*** (0.577)	33.648*** (0.658)	34.084*** (0.449)	34.098*** (0.448)	35.576*** (0.835)	34.003*** (0.688)		
Observations	98,967	30,783		75,571	54,179	129,750	129,782	35,047	41,028		
Number of pidp	12,346	4,887		8,622	6,144	14,748	14,749	6,586	9,319		

Notes: The table provides the results of four sub-sample analyses, the dependent variable is the weekly work hours of individuals who engaged in any type of employment.
Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A5: Sample characteristics of the variables use to identify mechanisms

	All	Individuals with NCDs	Individuals with
Sample size	15,269	5,807	9462
Having good mental health	0.737 (0.440)	0.683 (0.465)	0.770 (0.421)
Having good general health	0.503 (0.500)	0.329 (0.470)	0.611 (0.488)
Atleast 1 GP visit	0.701 (0.458)	0.822 (0.383)	0.627 (0.484)
More than 3 GP visit	0.277 (0.447)	0.407 (0.491)	0.196 (0.397)
Atleast 1 hospital visit	0.410 (0.492)	0.545 (0.498)	0.328 (0.469)
Has long covid	0.081 (0.273)	0.103 (0.305)	0.061 (0.240)

Notes: The table shows the mean values of sample characteristics of variables related to mechanisms. The sample consists of all individuals aged below 65 years who are included in at least one Covid survey. All figures (except long covid) represent pre-covid sample characteristics obtained from waves 9 and 10 of UKHLS. Long covid variables represent the mean values of the covid samples from November 2020 to September 2021.

Table A6: Regression results for Mental health/General health regression

VARIABLES	(1)	(2)	VARIABLES	(1)	(2)
	Mental Health	General Health		Mental Health	General Health
NCD	-0.0424*** (0.0067)	-0.1243*** (0.0064)	NCD* Jun 20	0.0086 (0.0099)	-
Wave5	0.0249*** (0.0058)	0.0891*** (0.0054)	NCD* Jul 20	-0.0063 (0.0100)	-
Wave6	0.0400*** (0.0057)	0.1150*** (0.0053)	NCD* Sep 20	-0.0131 (0.0103)	-
Wave7	0.0341*** (0.0056)	0.0575*** (0.0053)	NCD* Nov 20	0.0052 (0.0106)	0.0173* (0.0098)
Wave8	0.0301*** (0.0056)	0.0324*** (0.0052)	NCD* Jan 21	0.0082 (0.0107)	0.0253** (0.0099)
Wave9	0.0194*** (0.0056)	-0.0030 (0.0052)	NCD* Mar 21	-0.0126 (0.0105)	0.0147 (0.0098)
April 20	-0.1590*** (0.0060)	-	NCD* Sep 21	-0.0092 (0.0104)	0.0214** (0.0097)
May 20	-0.1055*** (0.0062)	-	Age	0.0030*** (0.0002)	-0.0032*** (0.0002)
Jun 20	-0.0762*** (0.0064)	-	Gender (Reference group: Male)		
Jul 20	-0.0087 (0.0064)	-	Female	-0.0855*** (0.0044)	-0.0148*** (0.0057)
Sep 20	-0.0112* (0.0066)	-	Ethnicity (Reference group: non-White)		
Nov 20	-0.0809*** (0.0068)	0.0563*** (0.0063)	White	0.0031 (0.0058)	0.0923*** (0.0077)
Jan 21	-0.1040*** (0.0068)	0.0383*** (0.0063)	Marital status (Reference group: Single or never married)		
Mar 21	-0.0432*** (0.0066)	0.0325*** (0.0061)	Married/ Civil partnership	0.0443*** (0.0048)	0.0218*** (0.0057)
Sep 21	-0.0046 (0.0065)	-0.0035 (0.0061)	Widowed	-0.0002 (0.0148)	0.0009 (0.0171)
NCD*Wave5	-0.0287*** (0.0096)	-0.0095 (0.0090)	Separated/Divorced	-0.0296*** (0.0074)	-0.0202** (0.0086)
NCD*Wave6	-0.0277*** (0.0094)	-0.0485*** (0.0088)	Education (Reference group: Less than O/L)		
NCD*Wave7	-0.0231** (0.0093)	-0.0318*** (0.0087)	O/L to AL	0.0182*** (0.0053)	0.0228*** (0.0067)
NCD*Wave8	-0.0381*** (0.0092)	-0.0140 (0.0086)	Al to College	0.0097 (0.0070)	0.0416*** (0.0089)
NCD*Wave9	-0.0248*** (0.0091)	-0.0040 (0.0085)	College and above	0.0082 (0.0051)	0.1097*** (0.0066)
NCD*April 20	0.0250*** (0.0094)	-	Having school-age children	-0.0023 (0.0046)	0.0086 (0.0053)
NCD*May 20	0.0146 (0.0097)	-	Constant	0.6369*** (0.0104)	0.5626*** (0.0131)
			Observations	168,396	118,472

Notes: Dependent variable: Probability of having a good mental/general health. The information on general health is available in COVID-19 surveys since November 2020.

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table A7: Regression results for pre-Covid and post-Covid mental health, general health and healthcare service use

VARIABLES	(1)	(2)	(3)	(4)	(5)
	Mental Health	General Health	Gpvisit (at least 1 visit)	Gpvisit (more than 3 visit)	Hospital visit (at least 1 visit)
NCD	-0.0817*** (0.0038)	-0.1607*** (0.0040)	0.1523*** (0.0043)	0.1944*** (0.0044)	0.1686*** (0.0048)
Post Covid	0.0089 (0.0118)	0.2121*** (0.0115)	-0.1036*** (0.0201)	0.1370*** (0.0192)	-0.1058*** (0.0219)
NCD*Post Covid	0.0136* (0.0074)	0.0481*** (0.0072)	0.0169** (0.0080)	-0.0779*** (0.0077)	-0.0462*** (0.0087)
Time	-0.0035*** (0.0008)	-0.0212*** (0.0007)	-0.0055*** (0.0014)	-0.0166*** (0.0014)	0.0019 (0.0016)
Age	0.0031*** (0.0002)	-0.0030*** (0.0002)	-0.0003 (0.0002)	-0.0012*** (0.0002)	0.0021*** (0.0002)
Gender (Reference group: Male)					
Female	-0.0695*** (0.0045)	-0.0091 (0.0058)	0.1296*** (0.0048)	0.1184*** (0.0051)	0.0877*** (0.0053)
Ethnicity (Reference group: non-White)					
White	0.0092 (0.0061)	0.0924*** (0.0079)	-0.0313*** (0.0063)	-0.0519*** (0.0067)	-0.0147** (0.0069)
Marital status (Reference group: Single or never married)					
Married/ Civil partnership	0.0441*** (0.0053)	0.0254*** (0.0060)	0.0109* (0.0059)	-0.0057 (0.0061)	0.0055 (0.0065)
Widowed	-0.0212 (0.0161)	0.0236 (0.0177)	-0.0041 (0.0185)	0.0280 (0.0189)	-0.0203 (0.0203)
Separated/Divorced	-0.0404*** (0.0081)	-0.0187** (0.0090)	0.0153* (0.0092)	0.0285*** (0.0095)	0.0354*** (0.0102)
Education (Reference group: Less than O/L)					
O/L to A/L	0.0194*** (0.0055)	0.0313*** (0.0069)	-0.0070 (0.0059)	-0.0282*** (0.0063)	0.0012 (0.0066)
A/L to College	0.0188** (0.0074)	0.0441*** (0.0091)	0.0049 (0.0080)	-0.0257*** (0.0084)	0.0246*** (0.0088)
College and above	0.0224*** (0.0054)	0.1186*** (0.0067)	0.0013 (0.0057)	-0.0512*** (0.0061)	0.0038 (0.0063)
Having school-age children	0.0092* (0.0050)	0.0086 (0.0055)	-0.0233*** (0.0058)	-0.0295*** (0.0059)	-0.0351*** (0.0064)
Constant	0.6666*** (0.0112)	0.7558*** (0.0132)	0.6874*** (0.0160)	0.4438*** (0.0159)	0.2079*** (0.0175)
Observations	95,210	95,678	69,928	69,928	69,949
Number of respondents	17,060	17,070	16,492	16,492	16,492

Notes: Dependent variable: probability of having good mental health, having good general health, visiting GP at least once a year, visiting GP more than 3 times a year and visiting the hospital at least once a year.

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1