

Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Pierce M, Hope H, Ford T, et al. Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population. *Lancet Psychiatry* 2020; published online July 21. [http://dx.doi.org/10.1016/S2215-0366\(20\)30308-4](http://dx.doi.org/10.1016/S2215-0366(20)30308-4).

Supplementary Table 1: Characteristics of UKHLS Wave 8/9

participants by whether participated in the COVID-19 web-survey,
unweighted analysis

	Responders (%)	Non-responders (%)*
N	17,452	24,999
Sex		
Men	7,287 (37.8)	11,994 (62.2)
Women	10,165 (43.9)	13,005 (56.1)
Age, years		
16-24	1,543 (31.4)	3,364 (68.6)
25-34	1,950 (35.4)	3,556 (64.6)
35-44	2,784 (41.0)	4,002 (59.0)
45-54	3,506 (45.6)	4,176 (54.4)
55-69	5,036 (50.8)	4,881 (49.2)
70 or more	2,633 (34.4)	5,020 (65.6)
Ethnicity		
White British	14,029 (44.9)	17,220 (55.1)
White non-British	779 (37.4)	1,302 (62.6)
Mixed	284 (35.5)	515 (64.5)
Asian	1,281 (24.9)	3,864 (75.1)
Black	392 (20.4)	1,532 (79.6)
Other	87 (26.1)	247 (74.0)
Equivalent household income quintile		
Lowest	2,163 (27.7)	5,638 (72.3)
2 nd	2,611 (32.7)	5,376 (67.3)
3 rd	3,146 (38.1)	5,108 (61.9)
4 th	3,957 (46.3)	4,597 (53.7)
Highest	4,395 (52.2)	4,026 (47.8)
Age of youngest child in household		
None	12,221 (42.3)	16,682 (57.7)
0 to 5 years	1,756 (33.6)	3,469 (66.4)
6 to 15 years	3,475 (45.1)	4,228 (54.9)
GHQ score (mean, \pm SD)	11.2 (\pm 5.5)	11.3 (\pm 5.7)

* All participants in Waves 8 or 9 who did not take part in the Covid-19 web-survey, including those deemed ineligible. Raw data, before corrective weighting applied.

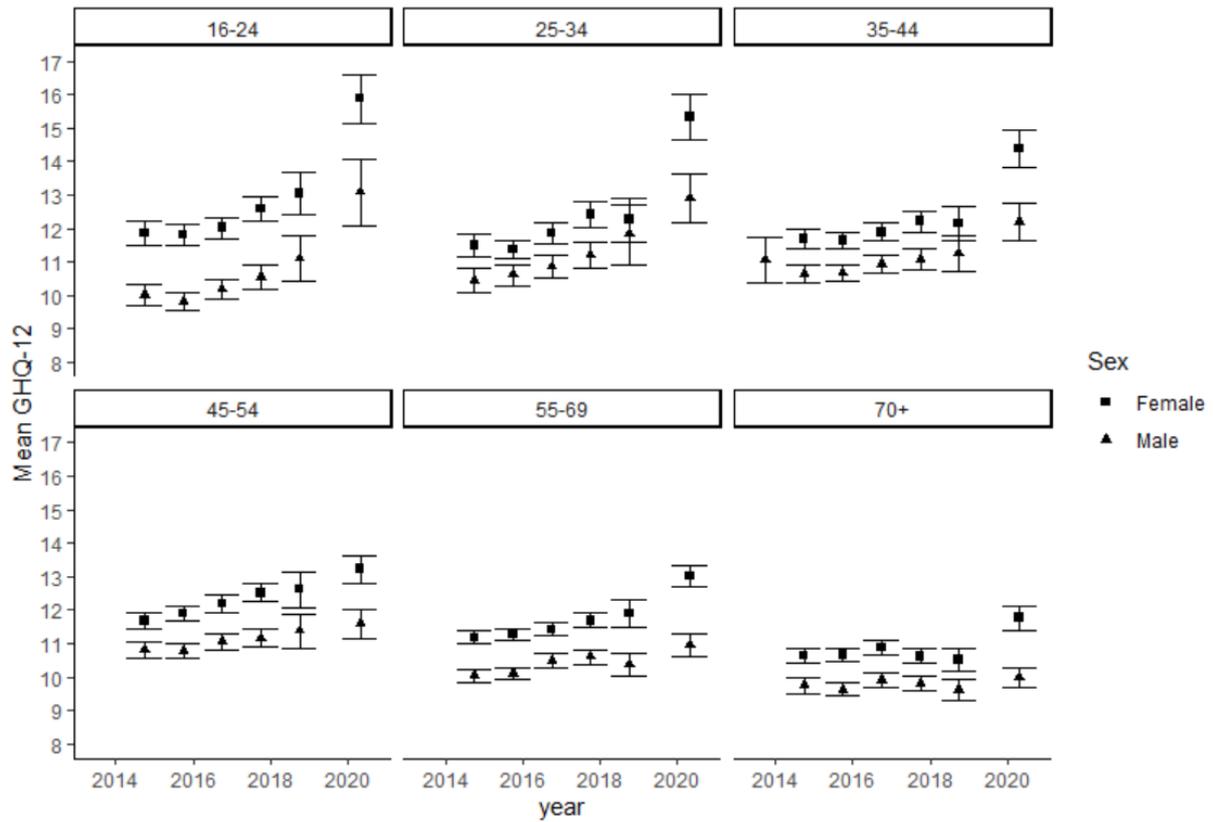
Supplementary Table 2: Mean GHQ-12 score and prevalence of clinically significant level of mental distress overall and by age and sex, by year

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	Apr-20
N	26,979	44,024	39,984	33,540	12,312	17,452
Mean GHQ-12 total						
Women, by age						
16-24	11.9 [11.5, 12.2]	11.8 [11.5, 12.1]	12.0 [11.7, 12.3]	12.6 [12.2, 13.0]	13.1 [12.4, 13.7]	15.9 [15.2, 16.6]
25-34	11.5 [11.2, 11.8]	11.4 [11.1, 11.6]	11.9 [11.5, 12.2]	12.4 [12.0, 12.8]	12.3 [11.6, 12.9]	15.3 [14.7, 16.0]
35-44	11.7 [11.4, 12.0]	11.7 [11.4, 11.9]	11.9 [11.6, 12.2]	12.2 [11.9, 12.5]	12.2 [11.6, 12.7]	14.4 [13.8, 14.9]
45-54	11.7 [11.4, 11.9]	11.9 [11.7, 12.1]	12.2 [11.9, 12.4]	12.5 [12.2, 12.8]	12.6 [12.1, 13.1]	13.2 [12.8, 13.6]
55-69	11.2 [11.0, 11.4]	11.3 [11.1, 11.5]	11.4 [11.2, 11.6]	11.7 [11.5, 11.9]	11.9 [11.5, 12.3]	13.0 [12.7, 13.3]
>=70	10.6 [10.4, 10.9]	10.7 [10.5, 10.9]	10.9 [10.7, 11.1]	10.6 [10.4, 10.8]	10.5 [10.2, 10.9]	11.8 [11.4, 12.1]
Men, by age						
16-24	10.0 [9.7, 10.3]	9.8 [9.6, 10.1]	10.2 [9.9, 10.5]	10.5 [10.2, 10.9]	11.1 [10.4, 11.8]	13.1 [12.1, 14.1]
25-34	10.5 [10.1, 10.8]	10.6 [10.3, 10.9]	10.9 [10.5, 11.2]	11.2 [10.8, 11.6]	11.8 [10.9, 12.7]	12.9 [12.2, 13.6]
35-44	10.6 [10.4, 10.9]	10.7 [10.4, 10.9]	10.9 [10.7, 11.2]	11.1 [10.8, 11.4]	11.3 [10.7, 11.8]	12.2 [11.6, 12.8]
45-54	10.8 [10.5, 11.1]	10.8 [10.6, 11.0]	11.1 [10.8, 11.3]	11.1 [10.9, 11.4]	11.4 [10.9, 11.9]	11.6 [11.2, 12.0]
55-69	10.0 [9.8, 10.2]	10.1 [9.9, 10.3]	10.5 [10.3, 10.7]	10.6 [10.4, 10.8]	10.4 [10.0, 10.7]	10.9 [10.6, 11.3]
>=70	9.8 [9.5, 10.0]	9.6 [9.4, 9.8]	9.9 [9.7, 10.1]	9.8 [9.6, 10.0]	9.6 [9.3, 9.9]	10.0 [9.7, 10.3]
Proportion with significant level of mental distress*						
Women, by age						
16-24	24.8 [22.1, 27.5]	25.5 [23.3, 27.6]	24.2 [22.0, 26.4]	29.8 [27.2, 32.3]	32.0 [27.5, 36.5]	44.0 [39.2, 48.9]
25-34	21.0 [18.7, 23.3]	20.2 [18.3, 22.1]	23.0 [20.8, 25.1]	24.5 [21.9, 27.1]	24.3 [19.9, 28.7]	40.4 [36.2, 44.6]
35-44	20.9 [18.9, 23.0]	20.8 [19.1, 22.4]	22.6 [20.7, 24.4]	23.5 [21.3, 25.6]	25.3 [21.5, 29.1]	37.9 [34.6, 41.3]
45-54	20.7 [19.0, 22.5]	21.3 [19.8, 22.9]	22.9 [21.3, 24.6]	24.6 [22.7, 26.5]	25.6 [22.2, 29.0]	31.3 [28.7, 34.0]
55-69	17.4 [16.1, 18.8]	18.2 [17.0, 19.5]	19.1 [17.7, 20.4]	20.6 [19.2, 22.1]	21.8 [19.2, 24.5]	30.9 [28.7, 33.0]
>=70	14.9 [13.2, 16.6]	14.8 [13.4, 16.2]	16.4 [14.9, 17.8]	14.8 [13.3, 16.4]	12.9 [10.6, 15.3]	21.8 [19.0, 24.7]

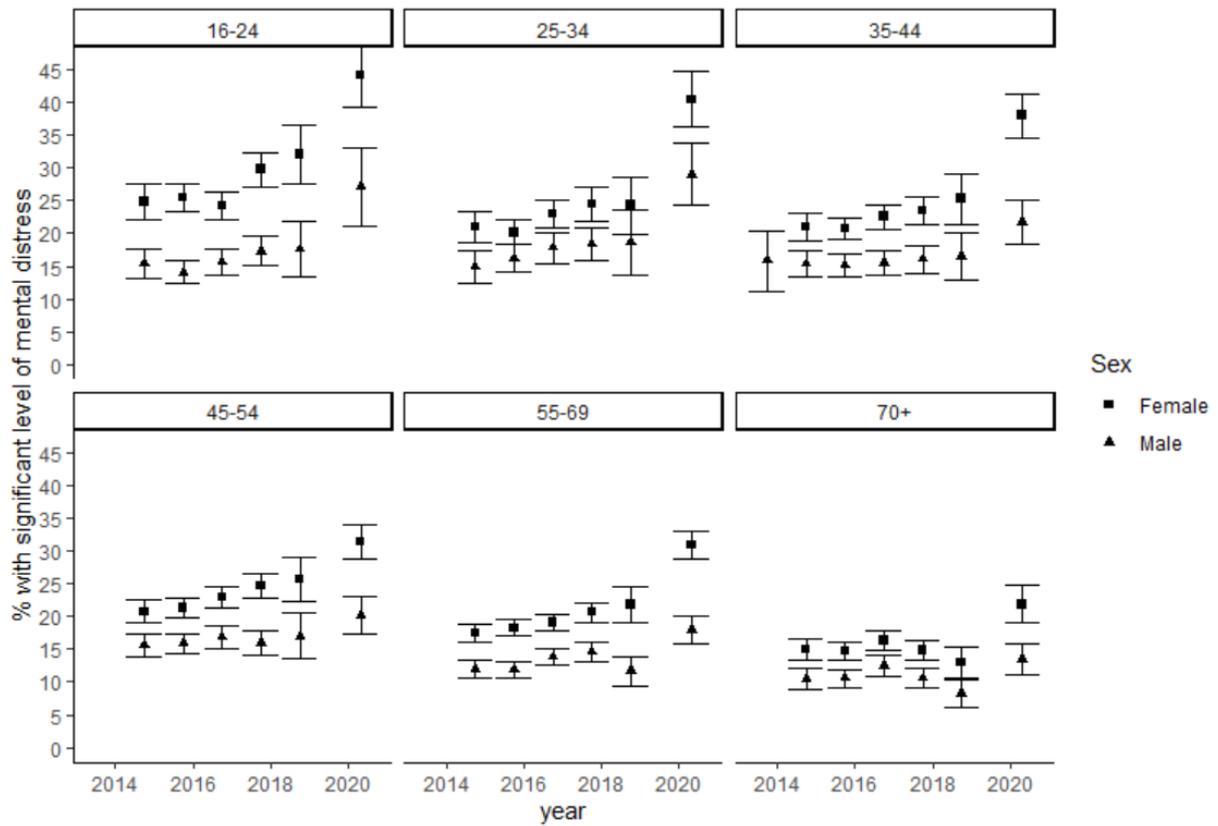
Men, by age						
16-24	15.3 [13.0, 17.6]	14.0 [12.3, 15.8]	15.6 [13.6, 17.6]	17.3 [15.0, 19.5]	17.6 [13.5, 21.8]	27.1 [21.2, 33.0]
25-34	14.9 [12.5, 17.4]	16.2 [14.1, 18.3]	17.8 [15.5, 20.2]	18.4 [15.8, 20.9]	18.5 [13.6, 23.5]	28.9 [24.3, 33.6]
35-44	15.3 [13.3, 17.3]	15.2 [13.4, 16.9]	15.5 [13.8, 17.3]	16.1 [14.0, 18.2]	16.5 [12.9, 20.1]	21.7 [18.4, 25.1]
45-54	15.6 [13.8, 17.3]	15.9 [14.4, 17.4]	16.8 [15.2, 18.5]	15.9 [14.2, 17.7]	17.0 [13.5, 20.4]	20.2 [17.4, 23.0]
55-69	11.9 [10.6, 13.2]	11.9 [10.7, 13.0]	13.9 [12.6, 15.1]	14.6 [13.1, 16.1]	11.7 [9.5, 13.9]	17.9 [15.7, 20.0]
>=70	10.5 [8.9, 12.1]	10.5 [9.2, 11.9]	12.5 [10.9, 14.0]	10.6 [9.2, 12.1]	8.3 [6.2, 10.3]	13.5 [11.1, 15.9]

Sample sizes are true (unweighted). All analyses are weighted, adjusting for complex survey design and non-response.

* GHQ-12 score 4 or more.



Supplementary Figure 1: Mean GHQ-12 score by age and sex, 2014-2020 weighted and adjusting for complex survey design and non-response.



Supplementary Figure 2: Percentage significant level of mental distress by age and sex, 2014-2020 weighted and adjusting for complex survey design and non-response.