THE LANCET Psychiatry

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, McManus S, Hope H, et al. Mental health responses to the COVID-19 pandemic: a latent class trajectory analysis using longitudinal UK data. *Lancet Psychiatry* 2021; published online May 6. http://dx.doi.org/10.1016/S2215-0366(21)00151-6.

Different mental health responses to the COVID-19 pandemic: latent class trajectory analysis using longitudinal UK data: Supplementary Materials

Table S1: Sample characteristics by wave, unweighted and weighted percentages

Characteristic	Pre-			April			May			June			July			Sept		
	pandemic	0.1	0.4	2020	0.1		2020	0.1		2020		21	2020		0/	2020	0.4	
	N	%	%	N	%	%	N	%	%	N	%	%	N	%	%	N	%	%
4.11	24.210	100	weighted		100	weighted		100	weighted		100	weighted		100	weighted		100	weighted
All	34,318	100	100	15.541	100	100	14011	100	100	1.1.100	100	100	10.554	100	100	10.05	100	100
T I GIVO				17,761			14,811			14,123			13,754			12,876		
Total GHQ																		
score		11.4	11.5		10.5	10.7		10.2	12.0		10.4	12.0		11.7	10.1		11.0	12.1
Mean		11.4	11.5		12.5	12.7		12.3	12.8		12.4	12.9		11.7	12.1		11.8	12.1
Skewness		1.12			1.21			1.33			1.34			1.54			1.54	
Kurtosis		4.40			4.66			5.04			5.05			5.97			6.01	
Gender	10.024	55.0	50.0	10.224	50.0	50	0.600	50.7	50.5	0.200	70.0	52 0	0.022	50. 4	71.0	7.522	50.5	52 0
Women	18,934	55.2	52.3	10,334	58.2	52	8,699	58.7	52·5	8,308	58.8	52.8	8,032	58.4	51.8	7,532	58.5	52.8
Men	15,380	44.8	47.7	7,411	41.7	48	6,112	41.3	47.5	5,803	41.1	46.9	5,713	41.5	48.2	5,333	41.4	47.1
Missing	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	12	0.1	0.0	9	0.1	0.0	11	0.1	0.0
Age-group			10.5	4.550		10.7	001		10.0	20-		10.0	0.11					
16-24	4,143	12.1	13.6	1,578	8.9	10.5	986	6.7	10.2	887	6.3	10.3	864	6.3	9.6	663	5.1	9.4
25-34	4,211	12.3	12.6	1,986	11.2	14	1,447	9.8	13.6	1,324	9.4	13.9	1,267	9.2	13.9	1,129	8.8	13.8
35-44	5,211	15.2	13.8	2,825	15.9	14.9	2,205	14.9	15.7	2,045	14.5	15.2	1,977	14.4	15.7	1,779	13.8	15.7
45-54	6,270	18.3	17.2	3,568	20.1	17.8	2,986	20.2	18.2	2,786	19.7	17.9	2,694	19.6	17.8	2,522	19.6	17.8
55-69	8,384	24.4	24.2	5,113	28.8	25.9	4,636	31.3	26.4	4,552	32.2	26	4,468	32.5	26.3	4,329	33.6	26.5
70+	6,097	17.8	18.6	2,691	15.2	16.9	2,551	17.2	16-1	2,529	17.9	16.8	2,484	18-1	16.8	2,454	19-1	16.9
Ethnicity																		
White	26,587	77.5	88.3	14,220	80.1	87.5	12,213	82.5	87-1	11,729	83.0	87	11,344	82.5	87.4	10,767	83.6	87
British																		
White other	1,510	4.4	4	792	4.5	3.7	656	4.4	3.7	633	4.5	3.8	598	4.3	3.5	566	4.4	3.4
Mixed	655	1.9	1.3	292	1.6	1.5	227	1.5	1.7	204	1.4	1.7	215	1.6	1.5	187	1.5	1.8
Asian	3,893	11.3	4.3	1,327	7.5	4.8	956	6.5	5.3	858	6.1	5.2	857	6.2	5.4	746	5.8	5.4
Black	1,313	3.8	1.7	413	2.3	1.8	295	2.0	1.7	274	1.9	1.6	286	2.1	1.6	250	1.9	1.7
Other	207	0.6	0.5	92	0.5	0.7	72	0.5	0.5	63	0.4	0.7	65	0.5	0.6	59	0.5	0.6
Region of UK																		
North East	1,187	3.5	4.2	605	3.4	4.2	528	3.6	4.2	498	3.5	4.1	470	3.4	4.1	460	3.6	4.2
North West	3,570	10.4	11.3	1,740	9.8	10.8	1,419	9.6	11.2	1,357	9.6	10.7	1,335	9.7	10.7	1,255	9.7	10.6
Yorkshire	3,067	8.9	9	1,507	8.5	8.8	1,239	8.4	8.4	1,183	8.4	8.5	1,150	8.4	8.7	1,078	8.4	8.7
and the Hum	- ,			<i>y</i> ·			,			,			, - 4			,		
East Mid	2,425	7.1	7.6	1,355	7.6	7.7	1,125	7.6	7.9	1,095	7.8	8.2	1,070	7.8	8	1,020	7.9	8.1
West Mids	2,952	8.6	8.7	1,508	8.5	9	1,279	8.6	8.7	1,202	8.5	8.7	1,181	8.6	8.6	1,089	8.5	8.8

East of	2,943	8.6	9.7	1,716	9.7	10.1	1,465	9.9	10.2	1,386	9.8	10.3	1,329	9.7	10.4	1,281	9.9	10.2
England	ĺ			,			,			ĺ			ĺ			,		1
London	4,193	12.2	11	1,920	10.8	11.6	1,487	10.0	11.3	1,348	9.5	11.2	1,357	9.9	11.5	1,201	9.3	11.4
South East	3,989	11.6	14	2,458	13.8	14.3	2,085	14.1	14.6	2,004	14.2	14.4	1,938	14.1	14.1	1,817	14.1	14.2
South West	2,717	7.9	9	1,616	9.1	9.1	1,389	9.4	8.7	1,350	9.6	8.6	1,295	9.4	8.7	1,242	9.6	8.7
Wales	2,164	6.3	4.6	1,041	5.9	4.6	883	6.0	4.8	846	6.0	4.7	826	6.0	4.6	751	5.8	4.5
Scotland	2,847	8.3	8.2	1,541	8.7	7.7	1,292	8.7	7.6	1,252	8.9	8	1,201	8.7	7.7	1,140	8.9	7.7
Northern	2,240	6.5	2.7	753	4.2	2.4	616	4.2	2.4	600	4.2	2.6	600	4.4	3	539	4.2	2.8
Ireland																		
Age of																		
youngest																		1
child in																		1
household																		
None	23,507	68.5	72.8	12,442	70.1	72.6	10,879	73.5	73.4	10,540	74.6	74	10,249	74.5	73.3	9,758	75.8	73.9
<6 years	4,072	11.9	10.7	1,789	10.1	9	1,221	8.2	8	1,101	7.8	7.9	1,051	7.6	8.4	940	7.3	7.9
6-15 years	6,009	17.5	16.6	3,530	19.9	18-4	2,711	18.3	18.6	2,482	17.6	18.2	2,454	17.8	18.3	2,178	16.9	18-2
Lives with																		1
partner																		
Yes	21,187	61.7	57.9	12,532	70.6	63.3	10,309	69.6	61.6	9,883	70.0	61.6	9,592	69.7	61.9	9,083	70.5	62.0
No	13,131	38.3	42.1	5,229	29.4	36.7	4,502	30.4	38-4	4,240	30.0	38.4	4,162	30.3	38.1	3,793	29.5	38.0
Keyworker																		
Yes	NA			4,583	25.8	25	4,140	28.0	27.7	3,906	27.7	27.3	122	0.9	1.2*	16	0.1	0.2*
No	NA			13,169	74.1	75	10,657	72.0	72.3	10,211	72.3	72.7	13,629	99.1	98.8	12,860	99.9	99.8
NHS																		1
shielding																		1
letter																		1
received	27.4			1.021	5 0		105	0.6	10.04	40	7.0	10.5%		10.1	10.00		15.0	0.54
Yes No	NA NA			1,031	5·8 94·2	7·7 92·4	137	9·6 90·4	10·9* 89·1	43 508	7·8 92·2	10.5*	52 464	10·1 89·9	18.3*	11	15.3	9·6* 90·5
	NA			16,724	94.2	92.4	1,291	90.4	89-1	508	92.2	89.5	464	89.9	81.7	61	84.7	90.5
Index of																		1
Multiple Deprivation																		1
quintile																		1
Most	NA			2,154	12.1	17.7	1,641	11.1	17.2	1,505	10.7	16.3	1,513	11.0	17.7	1,359	10.6	17
deprived	11/1			2,134	12.1	17.1	1,041	11.1	17-2	1,505	10.7	10.3	1,515	11.0	1/-/	1,339	10.0	''
2 nd	NA			2,607	14.7	19.6	2,157	14.6	19.3	2,017	14.3	20	2,000	14.5	20.2	1,857	14.4	20.3
3 rd	NA			2,864	16.1	19.1	2,414	16.3	19.1	2,313	16.4	19.5	2,227	16.2	18.6	2,107	16.4	18.8
4 th	NA			3,351	18.9	22.7	2,828	19.1	22.5	2,713	19.2	22.3	2,630	19.1	22	2,517	19.5	22.1
Least	NA			3,418	19.2	20.9	2,976	20.1	21.9	2,874	20.3	22	2,755	20.0	21.6	2,603	20.2	21.9
Prior mental	11/1			5,110	1/2	20 7	2,770	201	217	2,077	203		2,733	200	21 0	2,003	202	21)
illness																		1
Yes	2,081	6.1	6.7	NA			NA			NA			NA			NA		
No	32,237	93.9	93.3	NA			NA			NA			NA			NA	<u> </u>	

SAR-CoV-																		
2 infection																		
Not	NA			15,520	87.4		14,264	96.3		13,769	97.5		13,448	97.8		12,409	96.4	
suspected						88.3			96.4			97.6			97.6			96.1
Suspected	NA			2,203	12.4	11.6	517	3.5	3.5	319	2.3	2.2	288	2.1	2.2	438	3.4	3.7
Confirmed	NA			30	0.2	0.1	27	0.2	0.2	31	0.2	0.1	11	0.1	0.2	22	0.2	0.2
Local																		
lockdown																		
measures																		
Yes	NA			NA			NA			NA			13,658	99.3	99.3	10,985	85.3	85.3
No	NA			NA			NA			NA			96	0.7	0.7	1,891	14.7	14.8
Problem																		
paying bills																		
Yes	31,533	5.6	5.7	15,662	5.0	6.1	13,838	4.7	7.2	NA			12,877	4.5	6.6	NA		
No	1,920	91.9	91.9	884	88.2	86.7	695	93.4	90.5	NA			623	93.6	91.4	NA		
Missing	865	2.5	2.5	1,215	6.8	7.3	278	1.9	2.3				254	1.9	2.0			

Numbers in brackets are percentages, accounting for survey weights and clustered, stratified design.

NA = data not collected

^{*}Only asked if they had not responded to prior waves

Table S2: Patterns of non-response for 19,763 respondents to the UKHLS COVID-19 web-survey

N	%
2,002	10.1
4,952	25.1
	28.5
	30.4
	34.8
10,541	53.3
2,278	11.5
1,407	7.1
1,750	8.9
3,787	19.2
10,541	53.3
917	4.6
486	2.5
493	2.5
298	1.5
179	0.9
160	0.8
624	3.2
261	1.3
127	0.6
82	0.4
221	1.1
120	0.6
237	1.2
221	1.1
2,794	14.1
316	1.6
80	0.4
44	0.2
98	0.5
42	0.2
54	0.3
48	0.2
431	2.2
80	0.4
70	0.4
51	0.3
256	1.3
126	0.6
306	1.6
	2,002 4,952 5,640 6,009 6,887 10,541 2,278 1,407 1,750 3,787 10,541 917 486 493 298 179 160 624 261 127 82 221 120 237 221 120 237 221 2,794 316 80 44 98 42 54 48 431 80 70 51 256 126

Table S3: Characteristics of sample with all missing outcome data

Variable	Missing GHQ-	%	Complete for at	%	p-value
	12 for all waves		least one wave		
All	1,442	100	18,321	100	
Gender					0.408
Male	619	43.0	7,665	41.8	
Female	822	57.0	10,655	58.2	
Age-group					P<0.0001
16-24	311	21.6	1,474	8.0	
25-34	256	17.8	1,968	10.7	
35-44	328	22.8	2,788	15.2	
45-54	268	18.6	3,687	20.1	
55-69	216	15.0	5,419	29.6	
70+	63	4.4	2,985	16.3	
IMD quintile					P<0.0001
Most deprived	307	25.6	2,215	15.0	
2 nd	256	21.3	2,670	18.1	
3 rd	210	17.5	2,940	19.9	
4 th	222	18.5	3,427	23.2	
Least	205	17.1	3,526	23.9	

Table S4 local lockdown restrictions in England by local authority

Local authority	Date restrictions	Date restrictions ended
Local authority	began 05/08/2020	14/10/2020
Calderdale	25/07/2020	- 17 - 07 - 0 - 0
Blackburn with Darwen	20/0//2020	14/10/2020
Bolton	05/08/2020	14/10/2020
Bradford	01/08/2020	14/10/2020
Birmingham	15/09/2020	14/10/2020
Burnley	05/08/2020	14/10/2020
Bury	05/08/2020	14/10/2020
Chorley	22/09/2020	14/10/2020
County Durham	18/09/2020	14/10/2020
Fylde	22/09/2020	14/10/2020
Gateshead	18/09/2020	14/10/2020
Halton	22/09/2020	14/10/2020
Hyndburn	05/08/2020	14/10/2020
Kirklees	05/08/2020	14/10/2020
Knowsley	22/09/2020	14/10/2020
Lancaster	22/09/2020	14/10/2020
Leicester	04/07/2020	14/10/2020
Liverpool	22/09/2020	14/10/2020
Luton	25/07/2020	01/08/2020
Manchester	05/08/2020	14/10/2020
Newcastle upon Tyne	18/09/2020	14/10/2020
North Tyneside	18/09/2020	14/10/2020
Northumberland	18/09/2020	14/10/2020
Oldham	05/08/2020	14/10/2020
Pendle	05/08/2020	14/10/2020
Preston	22/09/2020	14/10/2020
Ribble Valley	22/09/2020	14/10/2020
Rochdale	05/08/2020	14/10/2020
Rossendale	05/08/2020	14/10/2020
Salford	05/08/2020	14/10/2020
Sandwell	15/09/2020	14/10/2020
Sefton	22/09/2020	14/10/2020
Solihull	15/09/2020	14/10/2020
South Ribble	22/09/2020	14/10/2020
South Tyneside	18/09/2020	14/10/2020
St. Helens	22/09/2020	14/10/2020
Stockport	05/08/2020	14/10/2020
Sunderland	18/09/2020	14/10/2020
Tameside	05/08/2020	14/10/2020
Trafford		
	05/08/2020	14/10/2020
Warrington	22/09/2020	14/10/2020
West Lancashire	22/09/2020	14/10/2020
Wigan	05/08/2020	14/10/2020
Wirral	22/09/2020	14/10/2020

<u>Description of pandemic containment measures in</u> the UK context:

The UK entered a national lockdown when the Health Protection (Coronavirus, Restrictions) Regulations 2020 came into force on 26th March. This shut schools and all but essential services and mandated people work from home. These statutory laws restricted movement and confined people to their homes, exceptions included to care for a relative, or to take exercise.

Some of these national restrictions began to relax from May onwards: May 10th people could exercise outside for as long as they wanted and people were urged to return to work if necessary; June 15th non-essential shops reopened; and 4th July, dubbed "super Saturday" bars, pubs and restaurants reopened with social distancing measures in place. Against this background of increasing freedom nationally, in England, local areas with rises in SARS-CoV-2 infections were asked to put restrictions in place. Generally these applied to local authority areas (small-area units with average population of 177 thousand), but in effect these often covered whole conurbations (e.g. Greater Manchester, population 2.8 Million) or larger regions.

Leicester entered the first local lockdown on 4th July, where only essential services and shops remained open, people worked from home and residents could not move outside of the authority border. Luton and local authorities in the North West (e.g. Calderdale, Blackburn with Darwen and Oldham) had local lockdown restrictions put into place by the 8th August 2020. Of the local authorities listed in the table adjacent, only Luton had restrictions lifted prior to the commencement of a new national system.

Compared to the rest of the country these areas remained in lockdown, however September saw some restrictions lifted; schools first, then gyms and swimming pools reopened with social distancing measures in place.

Table S5: Guidelines for Reporting on Latent Trajectory Studies (GRoLTS) checklist

1. Is the metric of time used in the statistical model reported?	Methods
2. Is information presented about the mean and variance of time	We have reported that each wave
within a wave?	took place over the course of a
	week. We believe this provides
	sufficient information.
3a. Is the missing data mechanism reported?	Table S2
3b. Is a description provided of what variables are related to	Table S3
attrition/missing data?	
3c. Is a description provided of how missing data in the analyses	Methods
were dealt with?	
4. Is information about the distribution of the observed variables	Table S1
included?	
5. Is the software mentioned?	Methods
6a. Are alternative specifications of within-class heterogeneity	Yes we had considered using LGCA
considered (e·g·, LGCA vs· LGMM) and clearly documented? If	
not, was sufficient justification provided as to eliminate certain	
specifications from consideration?	
6b. Are alternative specifications of the between-class differences	This was not an option in the
in variance–covariance matrix structure considered and clearly	available software
documented? If not, was sufficient justification provided as to	
eliminate certain specifications from consideration?	
7. Are alternative shape/functional forms of the trajectories	Yes
described?	
8. If covariates have been used, can analyses still be replicated?	NA
9. Is information reported about the number of random start values	Methods
and final iterations included?	
10. Are the model comparison (and selection) tools described from	Methods
a statistical perspective?	
11. Are the total number of fitted models reported, including a	Appendix page 8
one-class solution?	
12. Are the number of cases per class reported for each model	Appendix page 8
(absolute sample size, or proportion)?	
13. If classification of cases in a trajectory is the goal, is entropy	Appendix page 8
reported?	
14a. Is a plot included with the estimated mean trajectories of the	Appendix pages 8-9
final solution?	
14b. Are plots included with the estimated mean trajectories for	Appendix pages 8-9
each model?	
14c. Is a plot included of the combination of estimated means of	These are presented in separate
the final model and the observed individual trajectories split out	plots, appendix pages 8-9
for each latent class?	**
15. Are characteristics of the final class solution numerically	Yes
described (i·e·, means, SD/SE, n, CI, etc·)?	A 11.1.6
16. Are the syntax files available (either in the appendix,	Available from authors on request
supplementary materials, or from the authors)?	

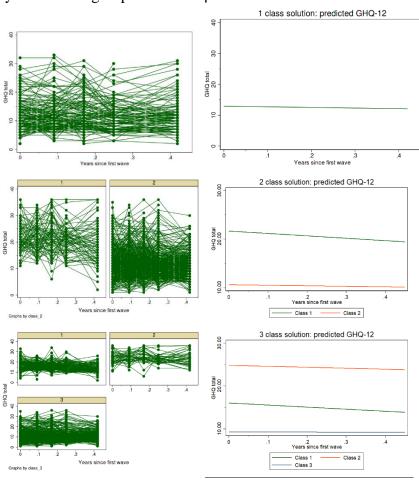
Further detail on latent class trajectory modelling

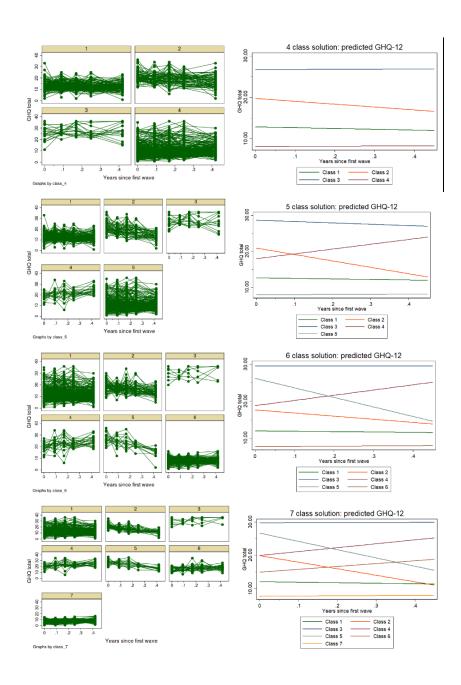
Table S6: Fit statistics for 1 to 7 class models

Model	BIC	Sample size	aVLMR	Entropy	Proportion in each group (%)*
		adjusted			
		BIC			
1-class	330298-4	330285.7	-	-	100
2-class	305098.9	305079.9	24415·6/p<0·001	0.92	15.8, 84.2
3-class	296779.6	296751.0	$6580 \cdot 7/p < 0.001$	0.82	28.7, 6.8, 64.5
4-class	292633.2	292595.1	$4043 \cdot 5/p < 0.001$	0.74	40.2, 13.3, 3.7, 42.8
5-class	290308-2	290260.5	2280·3/p<0·001	0.73	40.6, 9.3, 2.8, 5.3, 42.0
6-class	288474.5	288417.3	$1804 \cdot 6/p < 0.001$	0.70	40.0, 14.1, 1.7, 4.4, 2.9, 36.9
7-class	287319.5	287252.8	1147·6/p<0·001	0.67	40.4, 7.6, 1.6, 3.7, 2.5, 7.4, 36.8

^{*}from unweighted data.

Graphs for each model: spaghetti plots using a random subset of 1000 participants and predicted trajectories by latent class group membership.





Estimates from 5 class solution

Variable	Est	SE
Baseline		
Constant	12.511	0.059
Date	-1.488	0.172
Latent class 2		
Constant	8.695	0.510
Date	-16.206	1.542
Latent class 3		
Constant	16.382	0.756
Date	-2.267	2.397
Latent class 4		
Constant	5.760	0.802
Date	14.747	1.731
Latent class 5		

Constant	-2.511	0.643
Date	0.011	0.330
Random intercept SD	1.250	0.011

Table S7: Relative rate ratios and 95% confidence intervals from multinomial logistic regression comparing membership of being in the very good latent class compared to other classes associated with covariates

membership of bein	Latent class gro				
Characteristic	Consistently very good (n=7,623, 37.5%)	Consistently good (n=7,437, 39·3%)	Recovery (n=1,727, 12·0%)	Deteriorating $(n=1,011,7\cdot0\%)$	Consistently very poor (n= 523, 4·1%)
Gender					
Women	Ref	1.61 [1.39, 1.85]	2.23 [1.73, 2.86]	1.66 [1.23, 2.25]	2.27 [1.52, 3.39]
Men	Ref	Ref	Ref	Ref	Ref
Age-group	D. C.	1 26 [0 06 1 02]	1 22 [0 04 2 10]	1 77 [0 00 2 14]	1 42 50 72 2 001
16-24	Ref	1.36 [0.96, 1.93]	1.33 [0.84, 2.10]	1.77 [0.99, 3.14]	1.42 [0.72, 2.82]
25-34	Ref Ref	1·15 [0·86, 1·53] Ref	1.48 [0.93, 2.37]	1.80 [1.10, 2.96]	1·30 [0·73, 2·34]
35-44 45-54	Ref	0.75 [0.61, 0.93]	Ref 0.57 [0.39, 0.82]	Ref 0.84 [0.55, 1.28]	Ref 0.82 [0.45, 1.49]
55-69	Ref	0.68 [0.55, 0.84]	0.41 [0.29, 0.57]	0.60 [0.39, 0.91]	0.46 [0.29, 0.71]
70+	Ref	0.52 [0.41, 0.67]	0.28 [0.17, 0.44]	0.34 [0.20, 0.60]	0.13 [0.07, 0.23]
Ethnicity	KCI	0.22 [0.41, 0.07]	0.70 [0.17, 0.44]	0.34 [0.70, 0.00]	0.13 [0.07, 0.23]
White British	Ref	Ref	Ref	Ref	Ref
Other White	Ref	0.99 [0.63, 1.55]	0.74 [0.37, 1.46]	0.82 [0.42, 1.60]	0.76 [0.34, 1.69]
Mixed	Ref	1.37 [0.64, 2.92]	1.94 [0.61, 6.12]	1.43 [0.54, 3.73]	8.62 [2.79, 26.60]
Asian	Ref	1.19 [0.89, 1.61]	1.83 [1.04, 3.22]	2.41 [1.14, 5.08]	1.43 [0.76, 2.69]
Black	Ref	0.50 [0.22, 1.16]	0.34 [0.11, 1.03]	1.04 [0.36, 3.02]	1.87 [0.34, 10.22]
Other	Ref	0.54 [0.21, 1.37]	3.45 [1.49, 7.97]	0.58 [0.08, 4.47]	0.35 [0.04, 2.72]
Age of youngest					
child in household					
None	Ref	Ref	Ref	Ref	Ref
<6 years	Ref	1.25 [0.96, 1.63]	1.92 [1.24, 2.98]	1.23 [0.79, 1.93]	1.17 [0.72, 1.90]
6-15 years	Ref	1.06 [0.88, 1.27]	1.38 [1.02, 1.87]	1.30 [0.88, 1.92]	1.39 [0.88, 2.19]
Lives with partner					
Yes	Ref	0.72 [0.61, 0.85]	0.43 [0.33, 0.55]	0.37 [0.27, 0.50]	0.24 [0.17, 0.35]
No	Ref	Ref	Ref	Ref	Ref
Keyworker			0.07.50.70.4.00		0.0050.44.4.743
Yes	Ref	1.23 [1.06, 1.43]	0.95 [0.73, 1.22]	1.15 [0.85, 1.57]	0.99 [0.64, 1.51]
No	Ref	Ref	Ref	Ref	Ref
NHS shielding letter					
received Yes	Ref	1.03 [0.75, 1.42]	1.53 [0.89, 2.65]	1 94 [0 02 2 62]	2.70 [1.31, 5.54]
No	Ref			1·84 [0·93, 3·62] Ref	2.70 [1.31, 3.34] Ref
Index of Multiple	Kei	Rei	Kei	Kei	Kei
Deprivation quintile					
Most deprived	Ref	1.28 [0.96, 1.72]	2.32 [1.60, 3.38]	2.36 [1.40, 3.99]	5.56 [3.12, 9.91]
2nd	Ref	1.03 [0.81, 1.31]	1.66 [1.18, 2.36]	1.57 [1.01, 2.45]	2.44 [1.26, 4.75]
3rd	Ref	1.11 [0.90, 1.38]	1.58 [1.09, 2.29]	1.16 [0.70, 1.92]	1.81 [0.99, 3.31]
4th	Ref	0.86 [0.70, 1.07]	1.33 [0.89, 1.98]	1.24 [0.77, 1.99]	$1 \cdot 29 [0.72, 2.29]$
Least deprived	Ref	Ref	Ref	Ref	Ref
Prior mental illness					
Yes	Ref	2.64 [1.85, 3.79]	5.01 [3.40, 7.38]	4.79 [2.96, 7.76]	8.67 [5.42, 13.85]
No	Ref	Ref	Ref	Ref	Ref

Table S8: Repeating fixed effect model on augmented version of the GHQ-12 (excluding the question: 'Have you recently been able to enjoy your normal day-to-day activities?')

	Change in GHQ)-12* [95% CI]
Variable		
Having a local lockdown	0.21	0.00, 0.42
SAR-CoV-2 infection		
status		
Not suspected	REF	
Suspected	0.23	0.06, 0.40
Confirmed	1.90	0.94, 2.85
Problems paying bills	0.42	0.08, 0.76

^{*}Beta coefficients from fixed effects model·

Supplementary Figures

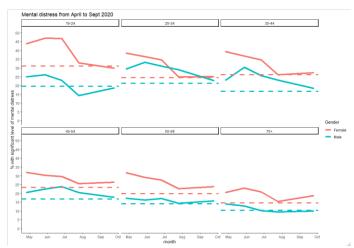


Figure S1: Proportion with significant levels of mental distress (scoring 3 or 4 on 4 or more questions) by age group and gender. The dotted lines represent the pre-pandemic average (from 2018-2019).

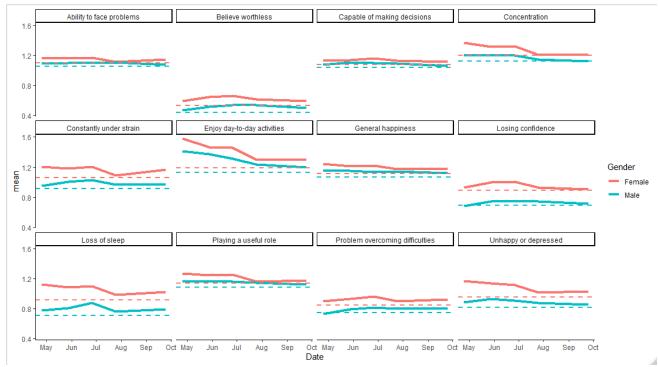


Figure S2: Mean score by specific question on the GHQ-12 (higher = worse) by gender. The dashed lines represent the pre-pandemic average (from 2018-2019).

Figure S3: Sensitivity analysis of trends since the beginning of pandemic after adapting the GHQ-12 removing the question: "Have you recently been able to enjoy your normal day-to-day activities?"

