# Correspondence

# The impact of Covid-19 and lockdown measures on self-reported life satisfaction and social relationships does not differ by ethnicity

To the editor

Mental health and wellbeing is reported to have declined due to the Covid-19 pandemic and lockdown measures,<sup>1,2,3</sup> and some data suggests this may vary by ethnic group.<sup>1,2,3</sup> There is however little information on Covid-19 and life satisfaction (e.g. physical, mental, spiritual health etc.) and social relationships by ethnicity. To address this we examined the impact of the Covid-19 pandemic and lockdown measures on self-rated life satisfaction and social relationships in a random sample of adults.

Between May 1st and June 18th 2020 we distributed a survey online and in hard copy via post, social media, and face-to-face in Leicester, UK, where 57% of residents are of non-white ethnicity. Ethical approval was gained from the University of Leicester. Questions covered a range of issues relating to Covid-19 and lockdown including life satisfaction, social relationships, religious practices, healthcare access etc. Likert style items were used to capture self-report ratings for before and during the pandemic e.g." How satisfied were you with the following aspects of your life before the Coronavirus outbreak and lockdown?" The number and proportion of participants who had reported an increase, decrease or no change in question response category during lockdown compared to prior were calculated for the total sample and stratified by ethnicity. Fisher's exact tests were used to test for significant differences in the changes in responses between ethnicities (alpha = 0.05).

Nine hundred and eighty adults consented and 787 respondents completed some or all questions. Participants were largely female (71.2%), and two thirds (66.6%) were aged between 35 and 65 years. Sixty-four percent of participants reporting ethnicity (n = 665) were White, 22% South Asian, 8.3% Black and 5.7% Mixed/Other.

Data were missing for between 100 and 102 participants (depending on question) due to non-completion. From Table 1, there were no significant differences between ethnicities in change in the majority of life satisfaction or social relationship variables. However for spiritual health, there was a significant difference between ethnicity groups in the proportion of respondents reporting a change in response, from pre to during lockdown, with 15.8% of South Asians reporting an increase in satisfaction, and 6.6% of White participants reporting an increase. There was also a significant difference for feelings of interest shared, with 20.7% of White individuals reporting they felt interests and ideas were not shared with those around them *more often*, and 31.6% of Mixed/Other participants reporting the same.

These data, although limited by the sample size and high proportion of females, suggest the Covid-19 pandemic and lockdown measures has not differentially impacted on selfrated life satisfaction or social relationships across ethnic groups. Some minority ethnic groups report a greater impact on life satisfaction and social relationships compared to White ethnic groups for certain variables, but our sample size did not permit more advanced modelling and adjustment for confounders. Future research should utilise larger samples and longitudinal data to determine if self-reported life satisfaction and social relationships have been impacted by the pandemic, and whether this varies by ethnicity. 
 Table 1
 Change in life satisfaction and social relationships from pre to during lockdown by ethnicity

Variable	Change	All (N = 787)	White (N = 426)	Black (N = 55)	S Asian (N = 146)	Mixed (N = 38)	Р
Satisfaction with mental health	Increased	61 (8.9)	35 (8.2)	4 (7.3)	19 (13.0)	1 (2.6)	0.199
	Same	463 (67.5)	291 (68.3)	35 (63.6)	99 (67.8)	24 (63.2)	
	Decreased	162 (23.6)	100 (23.5)	16 (29.1)	28 (19.2)	13 (34.2)	
Satisfaction with spiritual health	Increased	(8.7)	28 (6.6)	5 (9.1)	23 (15.8)	3 (7.9)	0.002
	Same	533 (77.7)	348 (81.7)	44 (80.0)	100 (68.5)	24 (63.2)	
	Decreased	93 (13.6)	50 (11.7)	6 (10.9)	23 (15.8)	11 (28.9)	
Satisfaction with	Increased	25 (3.6)	19 (4.5)	1 (1.8)	5 (3.4)	0 (0.0)	0.223
accommodation	Same	626 (91.1)	385 (90.4)	47 (85.5)	136 (93.2)	36 (94.7)	
	Decreased	36 (5.2)	22 (5.2)	7 (12.7)	5 (3.4)	2 (5.3)	
Satisfaction with safety	Increased	16 (2.3)	11 (2.6)	0 (0.0)	4 (2.7)	1 (2.6)	0.623
	Same	538 (78.3)	337 (79.1)	44 (80.0)	116 (79.5)	26 (68.4)	
	Decreased	133 (19.4)	78 (18.3)	11 (20.0)	26 (17.8)	11 (28.9)	
Satisfaction with employment	Increased	26 (3.8)	16 (3.8)	2 (3.6)	7 (4.8)	1 (2.6)	0.289
Satisfaction with employment	Same	530 (77.3)	336 (78.9)	43 (78.2)	108 (74.0)	24 (63.2)	
	Decreased	130 (19.0)	74 (17.4)	10 (18.2)	31 (21.2)	13 (34.2)	
Satisfaction with	Increased	28 (4.1)	15 (3.5)	2 (3.6)	8 (5.5)	1 (2.6)	0.867
personal/family relationships	Same	559 (81.5)	348 (81.7)	43 (78.2)	120 (82.2)	31 (81.6)	
	Decreased	99 (14.4)	63 (14.8)	10 (18.2)	18 (12.3)	6 (15.8)	
Satisfaction with physical health	Increased	86 (12.5)	51 (12.0)	6 (10.9)	26 (17.8)	1 (2.6)	0.015
	Same	464 (67.5)	305 (71.6)	36 (65.5)	85 (58.2)	26 (68.4)	
	Decreased	137 (19.9)	70 (16.4)	13 (28.9)	35 (24.0)	11 (28.9)	
Feeling of having no one to	More often	153 (22.3)	94 (22.1)	13 (23.6)	25 (17.1)	13 (34.2)	0.229
turn to	Same	443 (64.6)	279 (65.5)	36 (65.5)	99 (67.8)	18 (47.4)	
	Less often	90 (13.1)	53 (12.4)	6 (10.9)	22 (15.1)	7 (18.4)	
Feeling of lack of	More often	193 (28.1)	115 (27.0)	19 (34.5)	39 (26.7)	15 (39.5)	0.658
company/friendship	Same	375 (54.7)	236 (55.4)	29 (52.7)	81 (55.5)	18 (47.4)	0.000
	Less often	118 (17.2)	75 (17.6)	7 (12.7)	26 (17.8)	5 (13.2)	
Feeling of being alone	More often	174 (25.4)	109 (25.6)	16 (29.1)	34 (23.3)	10 (26.3)	0.952
	Same	396 (57.7)	240 (56.3)	32 (58.2)	88 (60.3)	22 (57.9)	01002
	Less often	116 (16.9)	77 (18.1)	7 (12.7)	24 (16.4)	6 (15.8)	
Feeling of being part of a group	More often	66 (9.6)	37 (8.7)	4 (7.3)	18 (12.3)	4 (10.5)	0.646
of friends	Same	383 (55.9)	243 (57.0)	32 (58.2)	78 (53.4)	17 (44.7)	0.010
	Less often	236 (34.5)	146 (34.4)	19 (34.5)	50 (34.2)	17 (44.7)	
Feel interests & ideas not	More often	150 (21.9)	88 (20.7)	13 (23.6)	33 (22.6)	12 (31.6)	<u>0.037</u>
shared by those around	Same	399 (58.2)	251 (58.9)	38 (69.1)	75 (51.4)	21 (55.3)	01057
	Less often	137 (20.0)	87 (20.4)	4 (7.3)	38 (26.0)	5 (13.2)	
Feel outgoing and friendly	More often	54 (7.9)	33 (7.7)	4 (7.3)	15 (10.3)	0 (0.0)	0.289
	Same	368 (53.6)	235 (55.2)	32 (58.2)	69 (47.3)	22 (57.9)	0.205
	Less often	264 (38.5)	158 (37.1)	19 (34.5)	62 (42.5)	16 (42.1)	
Feel close to people	More often	87 (12.7)	52 (12.2)	7 (12.7)	19 (13.0)	5 (13.2)	0.835
reer close to people	Same	395 (57.6)	244 (57.3)	29 (52.7)	91 (62.3)	22 (57.9)	0.055
	Less often	204 (29.7)	130 (30.5)	19 (34.5)	36 (24.7)	11 (28.9)	
Feel left out	More often	136 (19.8)	80 (18.8)	19 (34.5) 15 (27.3)	29 (19.9)	6 (15.8)	0.657
							0.057
	Same Less often	376 (54.8) 174 (25.4)	234 (54.9) 112 (26.3)	26 (47.3) 14 (25.5)	80 (54.8) 37 (25.3)	25 (65.8) 7 (18.4)	
Fool isolated from others							0.730
Feel isolated from others	More often	305 (44.5)	196 (46.0) 182 (42.0)	22 (40.0)	61 (41.8)	19 (50.0) 16 (42.1)	0.750
	Same	298 (43.3)	183 (43.0)	26 (47.3)	62 (42.5)	16 (42.1)	
	Less often	83 (12.1)	47 (11.0)	7 (12.7)	23 (15.8)	3 (7.9)	

(Continued)

Variable	Change	All (N = 787)	White (N = 426)	Black (N = 55)	S Asian (N = 146)	Mixed (N = 38)	Р
Feel can find companionship	More often Same	103 (15.0) 386 (56.3)	66 (15.5) 240 (56.3)	5 (9.1) 30 (54.5)	27 (18.5) 78 (53.4)	2 (5.3) 25 (54.5)	0.340
Feel there is someone they could turn to	Less often More often Same Less often	197 (28.7) 72 (10.5) 467 (68.2) 146 (21.3)	120 (28.2) 36 (8.5) 307 (72.1) 83 (19.5)	20 (36.4) 8 (14.5) 34 (61.8) 13 (23.6)	41 (28.1) 20 (13.7) 92 (63.0) 34 (23.3)	11 (36.4) 5 (13.2) 24 (63.2) 9 (23.7)	0.230

Table 1 Continued

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