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Why did some parents not send their children back to school following school closures during the COVID-19 pandemic: a cross-sectional survey

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ABSTRACT

Background On 23 March 2020, schools closed to most children in England in response to COVID-19 until September 2020. Schools were kept open to children of key workers and vulnerable children on a voluntary basis. Starting 1 June 2020, children in reception (4–5 years old), year 1 (5–6 years old) and year 6 (10–11 years old) also became eligible to attend school.

Methods 1373 parents or guardians of children eligible to attend school completed a cross-sectional survey between 8 and 11 June 2020. We investigated factors associated with whether children attended school or not.

Results 46% (n=370/803) of children in year groups eligible to attend school and 13% (n=72/570) of children of key workers had attended school in the past 7 days. The most common reasons for sending children to school were that the child's education would benefit, the child wanted to go to school and the parent needed to work. A child was significantly more likely to attend if the parent believed the child had already had COVID-19, they had special educational needs or a person in the household had COVID-19 symptoms.

Conclusions Following any future school closure, helping parents to feel comfortable returning their child to school will require policy makers and school leaders to communicate about the adequacy of their policies to: (A) ensure that the risk to children in school is minimised; (B) ensure that the educational potential within schools is maximised; and (C) ensure that the benefits of school for the psychological well-being of children are prioritised.

INTRODUCTION

On 23 March 2020, a nationwide closure of schools occurred across England in response to the COVID-19 pandemic. Only vulnerable children (those with a healthcare plan or social worker) and children of key workers (critical to the COVID-19 response) were able to attend.^{1 2} From 1 June 2020, children in reception (4–5 years), year 1 (5–6 years) and year 6 (10–11 years) also became eligible to attend.³ Until September 2020, school attendance was voluntary to those children eligible to attend.⁴

What is known about the subject?

- The COVID-19 pandemic resulted in the mass closure of schools for an extended period of time. A previous systematic review assessed parental attitudes towards smaller scale closures, finding that many parents (71%–97% across six studies) approved of closures, particularly where they were seen as an effective protective measure against a serious illness. The effect on a child's education and ability of the parent to work were reported as concerns.

What this study adds?

- During the partial reopening of schools in England in June 2020, most parents did not send their children to school. Parents who were not educated to degree level, not working, who lived in the North of England or who were from black, Asian and ethnic minority backgrounds were least likely to send their children back. Perceived benefits of education, risk of disease and children's well-being were the main drivers in determining parental decision to send them to school or not.

The benefits of closing schools to reduce the transmission of COVID-19 and the negative consequences of doing so were difficult to balance.^{5 6} Adding to the debate was emerging evidence of a low transmission rate of COVID-19 among children^{7–10} and a recognition that outbreaks may occur nonetheless.^{11 12}

Irrespective of this debate, it was clear that many parents felt far from comfortable with their children attending school in the first months of the pandemic, even where it was encouraged.¹³ A worldwide systematic review of school closures suggests several factors that may be relevant to whether a child attended school during an infectious disease outbreak.¹⁴ Nineteen papers were included in



the review, samples representing between 67 and 4171 school-aged children (5–19 years). Perceived risk of infection,^{15 16} concern about the impact of a closure on education^{15 17} and parental concerns about their child's mental health were key issues.¹⁸ Understanding the key issues that determine whether a parent is willing to send their children back to school when it is partially open, and ensuring that school policies and communications address these concerns, should help inform reopening schools, in this or any future pandemic.

In this study, we investigated factors associated with a parent's willingness to send their child to school when they partially reopened, following closures due to the COVID-19 pandemic. We investigated these factors for children in reception, year 1 or year 6 and for families where at least one parent was a key worker.

METHODS

Design

We commissioned a market research company, BMG Research, to administer a cross-sectional survey 1 week after schools in England reopened for children in reception, year 1 and year 6 (8–11 June 2020).¹⁹ We have previously reported data from this survey relating to parental perceptions of the presence of hygiene procedures within schools.²⁰

Participants

Participants (n=2447) were recruited from BMG Research's panel, and to achieve a sample broadly representative of the population, BMG Research monitored region, child age, child gender, parent/guardian age and parent/guardian gender. Participants were eligible for the study if they were aged 18 years or over, lived in England and were a parent or guardian to a school-aged child (4–18 years) who usually lived with them. One hundred and eighty-three participants were screened out for non-eligibility, 226 participants dropped out after starting the survey and 28 completed but were removed for quality control such as completing the survey quickly or for 'straight-lining' (selecting the same option for every question) suggesting inattention to the questions. A total of 2010 participants remained. The sample fell within five percentage points of the national population by the child's gender, key stage and type of school attended against the known distribution for school children in England.²¹ The sample used in this paper were 803 parents of children in eligible school years and 570 parents from families in which at least one parent was a key worker (nine participants were removed from this group due to logical inconsistencies which suggested they had accidentally completed the wrong section).

Participants were paid equivalent to £0.60.

Study materials

The full survey is available in the online supplemental materials.

All participants answered questions referring to their child who had the most recent birthday. In cases where children shared a birthday, we asked the parent to select one child.

Our survey had two sections. Section 1 was only completed by parents who had a child in reception, year 1 or year 6 or by parents who did not have a child in these year groups, but they or their spouse were a key worker. It contained questions about whether the child had attended school in the past week. Section 2 was completed by these parents and also by parents who did not have a child eligible to attend school. It contained general questions on views about risk of COVID-19, family living and school safety measures. In this paper, we only report data from section 1, relating to actual attendance in the past week.

Personal characteristics

We asked participants to report their gender, age, region, household income, employment status, marital status, ethnicity and level of education. We also asked whether anyone within the household was aged over 70 years or had a health condition that made them vulnerable to COVID-19.

We asked participants to report the child's gender, age, school year, school type (fee paying or state funded) and whether the child had special educational needs (SENs).

School attendance

Participants were asked how many times the child had attended school in the past 7 days. Depending on the response, parents were presented with randomised statements: 10 for why they were sending the child to school; 12 for why they were only sending the child to school part-time; or 16 why their child was not attending school. We asked participants to 'tick any [statement] that applies'. Participants also had the option to write-in text for 'other reason'.

COVID-19 symptoms

We asked participants to report if the selected child had experienced any symptoms 'in the past 7 days' from a list of 10 symptoms. We also asked if they or a household member (other than the child) had experienced symptoms 'in the past 14 days' from the same symptom list. We asked participants whether they thought their child had had COVID-19.

Well-being

We asked participants to report the child's well-being using two subscales from the Revised Child Anxiety Disorder Scale (RCADS):²² the generalised anxiety disorder (GAD) subscale and the major depressive disorder (MDD) subscale.

Patient and public involvement

A school trustee contributed to the development of the survey materials and coauthored this paper.

ANALYSIS

Recoding of variables

School attendance was defined as a child who attended school for at least 1 day in the past 7 days.

We created two binary variables to indicate whether the child, and someone in the household (other than the child), had a health condition that might make them particularly vulnerable to COVID-19.

We created two binary variables to indicate recent presence of COVID-19 symptoms in the child and someone else in the household. We defined presence of COVID-19 symptoms as experiencing a 'new, continuous cough', 'high temperature/fever', 'loss of sense of smell (fully or partial)' or 'loss of taste'. We coded a binary variable for the parent's perception of whether the child had had COVID-19 by grouping together 'they have definitely had it or definitely have it now' and 'they have probably had it or probably have it now'.

We created a binary variable to indicate low well-being in the child. We assigned a value against each answer from 0 ('never') to 3 ('always') on the GAD and MDD RCADS subscales and created a total score for each subscale. We then turned each total score into a t-score, a method used to normalise RCADS scores within the population, by child's age and gender.^{22 23} We used the same process for reception to year 3 as for year 4. We used a t-score cut-off of 65 or above on either GAD or MDD subscales to indicate low well-being.

For all variables, we coded the responses 'don't know', 'not applicable', 'prefer not to say' and 'prefer to self-describe' as missing data.

Analysis

We ran a series of binary logistic regressions using SPSS V.26.0,²⁴ investigating univariable associations between each of our predictor variables and sending the child to school. We ran a second set of binary logistic regressions controlling for personal characteristics shown in the results.

We analysed frequencies for the statements responding to sending the child to school for a full week (5 days), part-time (less than 5 days) and for not sending the child to school.

For ease of interpretation, we used unweighted data in our analysis.

We applied a Bonferroni correction to our results ($p \leq 0.001$) due to running many analyses (children in school years $n=29$ and children of key workers $n=31$). Results meeting this criterion are marked by a dagger (†) in the tables.

Sample size calculation

Post hoc calculations were run on the two subsamples that had a margin of error of plus or minus 5% at the 95% confidence level for each prevalence estimate.

RESULTS

School attendance

Nearly half (46%, 95% CI 43% to 50%, $n=370/803$) of children in eligible school years had attended school

and about half had not (54%, 95% CI 50% to 57%, $n=432/803$). One participant was unsure if the child had attended school. The most common reasons for not sending a child to school were: thinking it was too risky for the child to attend school ($n=223$, 52%), the school not being open ($n=140$, 32%) and having another child who could not go to school ($n=67$, 16%). The most common reasons for sending a child to school were: the child's education would benefit ($n=208$, 56%), the child wants to go to school ($n=200$, 54%) and the child will benefit from seeing their friends ($n=187$, 51%). Of participants whose child did not attend school for a full week ($n=204$, 25%), the most common reasons for partial attendance were: the school only offers them to be in part-time ($n=80$, 39%), it is less risky for them to be in part-time ($n=40$, 20%) and parent only sending them in on days where the lessons are important ($n=28$, 14%).

Only 13% (95% CI 10% to 15%, $n=72/570$) of children of key workers had attended school, most children had not (87%, 95% CI 85% to 90%, $n=497/570$). One participant was unsure if the child had attended school. The most common reasons for children not attending school were: the school was not open ($n=259$, 52%), the school had asked the child not to attend ($n=117$, 24%) and thinking that it was too risky for the child to attend school at the moment ($n=109$, 22%). The most common reasons for attending school were: the parent needing to work ($n=40$, 56%), the child wanting to go to school ($n=35$, 49%) and thinking that the child's education would benefit from being at school ($n=30$, 42%). Of participants with children who attended school part-time, the most common reasons were: the school only offered them to be in part-time ($n=16$, 41%), parent only sent them in on days where the lessons are important ($n=8$, 21%) and believing it was less risky for them to be in part-time ($n=7$, 18%).

Associations

Participant characteristics for children in eligible school years and for children of key workers are shown in [table 1](#). Parents of children in eligible school years were less likely to send the child to school if they were educated to A-level or below, not working, of black, Asian and minority ethnicity (BAME) or living in the North East, North West and Yorkshire and the Humber compared with London, whereas children of key workers were more likely to attend school for participants aged 45 years and under and who were working. Child attendance was more likely for children in eligible school years when in a fee-paying school and if they had a health condition that made them vulnerable to COVID-19. For both groups, attendance was more likely for children who had SENs, reported low well-being, thought their child had had COVID-19 and when a person over 70 years was living in the household. There was also a significant association in both groups between a child being more likely to attend school and the child having experienced COVID-19 symptoms in the past 7 days or another person in the household having experienced COVID-19 symptoms in the past 14 days.

Table 1 Participant characteristics for children in eligible school years (n=803) and children of key workers (n=570) by school attendance

Level	Children in eligible school years				Children of key workers				
	Did not attend school, n (%)	Attended school, n (%)	OR (95% CI)	Adjusted OR (95% CI)‡	Did not attend school, n (%)	Attended school, n (%)	OR (95% CI)	Adjusted OR (95% CI)‡	
Gender	Male	201 (52)	187 (48)	1.22 (0.92 to 1.61)	1.04 (0.75 to 1.43)	227 (85)	39 (15)	1.53 (0.92 to 2.55)	1.61 (0.91 to 2.85)
	Female	230 (57)	177 (43)	Reference	Reference	268 (90)	30 (10)	Reference	Reference
Age (years)	18–35	129 (49)	136 (51)	1.37 (0.92 to 2.03)	1.23 (0.79 to 1.92)	54 (77)	16 (23)	3.16* (1.56 to 6.37)	2.95* (1.23 to 7.08)
	36–45	212 (56)	164 (44)	1.01 (0.70 to 1.46)	0.98 (0.65 to 1.48)	198 (86)	33 (14)	1.76* (1.01 to 3.12)	2.14* (1.12 to 4.09)
	More than and equal to 46 years	91 (56.5)	70 (43.5)	Reference	Reference	245 (91)	23 (9)	Reference	Reference
Region	East Midlands	33 (60)	22 (40)	0.50* (0.27 to 0.93)	0.59 (0.31 to 1.14)	45 (85)	8 (15)	0.85 (0.32 to 2.22)	1.23 (0.40 to 3.75)
	East of England	38 (48)	41 (52)	0.81 (0.48 to 1.38)	0.92 (0.52 to 1.64)	54 (82)	12 (18)	1.06 (0.45 to 2.52)	1.38 (0.50 to 3.81)
	North East	33 (67)	16 (33)	0.36* (0.19 to 0.71)	0.38* (0.81 to 0.78)	32 (89)	4 (11)	0.60 (0.18 to 1.98)	0.93 (0.25 to 3.46)
	North West	68 (65)	36 (35)	0.40† (0.24 to 0.66)	0.39* (0.23 to 0.68)	80 (93)	6 (7)	0.36* (0.13 to 0.99)	0.61 (0.19 to 1.89)
	South East	70 (51)	66 (49)	0.71 (0.45 to 1.11)	0.92 (0.56 to 1.52)	82 (89)	10 (11)	0.58 (0.24 to 1.94)	0.81 (0.29 to 2.29)
	South West	24 (46)	28 (54)	0.88 (0.47 to 1.63)	1.16 (0.58 to 2.31)	42 (87.5)	6 (12.5)	0.68 (0.42 to 1.94)	1.18 (0.37 to 3.82)
	West Midlands	39 (56)	30 (44)	0.58 (0.33 to 1.01)	0.63 (0.34 to 1.18)	48 (89)	6 (11)	0.60 (0.21 to 1.68)	0.84 (0.27 to 2.60)
	Yorkshire and the Humber	52 (62)	31 (37)	0.45* (0.26 to 0.76)	0.52* (0.29 to 0.93)	52 (88)	7 (12)	0.64 (0.24 to 1.73)	0.80 (0.27 to 2.41)
London	75 (43)	100 (57)	Reference	Reference	62 (83)	13 (17)	Reference	Reference	
Household income	≤£34 999	164 (54)	142 (46)	1.00 (0.75 to 1.33)	1.34 (0.95 to 1.90)	185 (89)	23 (11)	0.75 (0.44 to 1.28)	0.96 (0.51 to 1.81)
	≥£35 000	254 (54)	220 (46)	Reference	Reference	285 (86)	47 (14)	Reference	Reference
Employment status§	Working	362 (52)	337 (48)	1.95* (1.25 to 3.05)	1.94* (1.16 to 3.24)	435 (86)	70 (14)	9.33* (1.27 to 68.47)	8.64* (1.13 to 65.96)
	Not working	67 (68)	32 (32)	Reference	Reference	58 (98)	1 (2)	Reference	Reference
Education level	≤A-level	179 (63)	105 (37)	0.56† (0.41 to 0.75)	0.59* (0.42 to 0.84)	227 (88)	31 (12)	0.91 (0.55 to 1.51)	1.27 (0.71 to 2.26)
	≥Degree	248 (49)	261 (51)	Reference	Reference	267 (87)	40 (13)	Reference	Reference
Marital status	Living alone	49 (48)	54 (52)	1.34 (0.88 to 2.02)	1.30 (0.82 to 2.06)	75 (88)	10 (12)	0.91 (0.45 to 1.85)	0.92 (0.41 to 2.03)
	Married/cohabiting	383 (55)	316 (45)	Reference	Reference	422 (87)	62 (13)	Reference	Reference
Ethnicity	White	355 (53)	316 (47)	1.23 (0.84 to 1.12)	1.66* (1.07 to 2.58)	450 (87)	65 (13)	1.04 (0.42 to 2.53)	1.47 (0.53 to 4.13)
	BAME	72 (58)	52 (42)	Reference	Reference	43 (78)	12 (22)	Reference	Reference
Child gender	Boy	230 (51.5)	217 (48.5)	1.25 (0.94 to 1.65)	1.15 (0.85 to 1.56)	244 (87)	36 (13)	1.04 (0.63 to 1.70)	0.96 (0.56 to 1.66)
	Girl	202 (57)	153 (43)	Reference	Reference	253 (87.5)	36 (12.5)	Reference	Reference

Continued

Table 1 Continued

	Level	Children in eligible school years				Children of key workers			
		Did not attend school, n (%)	Attended school, n (%)	OR (95% CI)	Adjusted OR (95% CI)‡	Did not attend school, n (%)	Attended school, n (%)	OR (95% CI)	Adjusted OR (95% CI)‡
School year	Early years	77 (59)	53 (41)	0.74 (0.50 to 1.10)	0.79 (0.51 to 1.23)	¶	¶	¶	¶
	Key stage 1	157 (54)	132 (46)	0.90 (0.66 to 1.22)	0.88 (0.63 to 1.24)	30 (86)	5 (14)	2.10 (0.57 to 7.81)	1.52 (0.37 to 6.30)
	Key stage 2	198 (52)	185 (48)	Reference	Reference	120 (86)	20 (15)	2.10 (0.75 to 5.86)	1.45 (0.47 to 4.44)
	Key stage 3	¶	¶	¶	¶	152 (87)	23 (13)	1.91 (0.69 to 5.24)	1.58 (0.55 to 4.55)
	Key stage 4	¶	¶	¶	¶	132 (87)	19 (13)	1.81 (0.65 to 5.08)	1.44 (0.49 to 4.24)
	Years 12 and 13	¶	¶	¶	¶	63 (93)	5 (7)	Reference	Reference
School type	Fee paying	35 (33)	71 (67)	2.68† (1.74 to 4.13)	2.50† (1.56 to 4.00)	30 (77)	9 (23)	2.20* (1.00 to 4.85)	2.04 (0.82 to 5.07)
	State funded	395 (57)	299 (43)	Reference	Reference	462 (88)	63 (12)	Reference	Reference
Child has SEN	Yes	22 (31)	48 (69)	2.78† (1.64 to 4.70)	2.30* (1.27 to 4.17)	28 (61)	18 (39)	5.74† (2.97 to 11.08)	7.92† (3.59 to 17.46)
	No	406 (56)	319 (44)	Reference	Reference	464 (90)	52 (10)	Reference	Reference
Low child well-being	Yes	92 (42)	124 (57)	1.86† (1.36 to 2.55)	1.47* (1.04 to 2.07)	127 (82)	28 (18)	1.85* (1.11 to 3.10)	1.78* (1.00 to 3.21)
	No	340 (58)	246 (42)	Reference	Reference	370 (89)	44 (11)	Reference	Reference
Child vulnerable COVID-19	Yes	28 (39)	44 (61)	2.00* (1.21 to 3.28)	1.76* (1.00 to 3.10)	33 (82.5)	7 (17.5)	1.49 (0.63 to 3.50)	0.93 (0.33 to 2.63)
	No	401 (56)	316 (44)	Reference	Reference	455 (87.5)	65 (12.5)	Reference	Reference
Household vulnerable COVID-19	Yes	115 (60)	78 (40)	0.78 (0.56 to 1.08)	0.74 (0.51 to 1.06)	134 (88)	18 (12)	0.90 (0.50 to 1.60)	0.56 (0.44 to 1.67)
	No	295 (53)	258 (47)	Reference	Reference	314 (87)	47 (13)	Reference	Reference
Child COVID-19 symptoms	Yes	15 (24)	47 (76)	5.05† (2.22 to 7.36)	3.02* (1.49 to 6.15)	11 (58)	8 (42)	5.52† (2.14 to 14.24)	5.25* (1.58 to 17.41)
	No	417 (56)	323 (44)	Reference	Reference	486 (88)	64 (12)	Reference	Reference
Household COVID-19 symptoms	Yes	9 (17)	43 (83)	6.18† (2.97 to 12.86)	6.04† (2.62 to 13.91)	13 (65)	7 (35)	4.00* (1.54 to 10.42)	4.11* (1.26 to 13.44)
	No	423 (56)	327 (43)	Reference	Reference	484 (88)	65 (12)	Reference	Reference
Child has had or currently has COVID-19	Yes	36 (24)	112 (76)	4.78† (3.18 to 7.17)	4.03† (2.57 to 6.30)	40 (67)	20 (33)	4.40† (2.40 to 8.08)	5.20† (2.48 to 10.93)
	No	396 (61)	258 (37)	Reference	Reference	457 (90)	52 (10)	Reference	Reference
Someone over 70 years	Yes	11 (26)	32 (74)	3.62† (1.80 to 7.30)	3.19* (1.45 to 7.05)	8 (57)	6 (43)	5.56* (1.87 to 16.52)	3.49* (0.98 to 12.46)
	No	421 (55.5)	338 (44.5)	Reference	Reference	489 (88)	66 (12)	Reference	Reference

Decimal places have been used for rounding errors.

*P ≤ 0.05 and formatted bold.

†P ≤ 0.001 and formatted bold.

‡Adjusting for participant gender, age, region, household income, employment status, education level, marital status, ethnicity and the child's gender, school year and school type.

§Working includes students and volunteers.

¶Data not applicable for the sample.

BAME, black, Asian and minority ethnicity; SEN, special educational need.

DISCUSSION

Most children eligible to attend school did not attend 1 week after schools in England began to reopen to more children.²⁵ Worryingly, we observed patterns that seemed likely to entrench existing educational inequalities. Children from households where parents have lower education achievements, BAME households and households in the North of England and state funded being least likely to attend school.

Our results suggest that several broad areas determined attendance at school. First, risk perceptions were crucial. The response 'it is too risky' featured highly in parental reasons for not sending children to school. Second, children were also more likely to attend school when parents thought their child had had COVID-19 which could indicate the belief their child is immune to further infection.²⁶ Unexpectedly, children were more likely to attend school when they had a health condition that made them vulnerable to COVID-19 and when a person over 70 years was living in the household. We speculate that this may be because these circumstances affect the parent's ability to look after the child at home.

Poorer perceived child well-being was associated with them being more likely to attend school. This finding may reflect parental desire to improve their child's well-being that may have been impacted by the school closure.²⁷ This was also apparent in reasons parents gave for sending their child to school. As expected,¹⁴ concerns about education also featured highly as a reason for attendance, while perceptions that schools could not provide good quality education or that some lessons were not as important were cited as reasons for absence or partial attendance.

Despite most children of key workers not attending school, needing to work was the most reported reason for school attendance, and the school not opening or asking the child not to attend were the most commonly reported reasons for the child not being in school. This suggests that work commitments were the main driver for this group.

One notable finding was that children who had symptoms of COVID-19 in the past 7 days or whose household members had these symptoms in the past 14 days were significantly more likely to have gone to school. We do not know if the child attended school while having symptoms or when symptoms were present in the household (against self-isolation guidance).²⁸ However, given that school closure is specifically designed to reduce the transmission of respiratory infections in general, it is also possible that this reflects the re-emergence of transmission of upper respiratory tract infections, or COVID-19 specifically, within the school environment.²⁹ It may also reflect increased anxiety or awareness among parents around COVID-19 symptoms, resulting in higher symptom detection and reporting.

Limitations

Several limitations should be borne in mind for this study. First the cross-sectional nature of this study limits our ability to draw causal findings. Second, the RCADS

subscale was used to indicate low well-being but is currently not validated for children under 8 years.³⁰ Third, online polls can be unrepresentative and lead to response and self-reporting bias.³¹ However, in line with the reasoning relating to the use of non-probability samples in social sciences,³² we assume that the associations within our data do generalise to the wider population. Fourth, we ran many analyses raising the possibility of type 1 errors. While we have provided Bonferroni corrections in the tables for readers who wish to correct this, this correction in turn may be overly conservative.

CONCLUSION

Our findings support previous research by suggesting that during an infectious disease outbreak, parents' decision to send their child to school was impacted by the risk of disease (COVID-19), child's education and well-being. Furthermore, without reassuring parents in these three areas and encouraging them to send their children to school health inequalities are likely to be increased.

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Contributors All authors contributed to the conceptualisation of the study and approved the final draft. LW designed the survey, analysed the data and drafted the manuscript. LES and GJR designed the survey, analysed the data and edited the manuscript. RKW edited the manuscript. RA and AR designed the survey and edited the manuscript. SW edited the manuscript.

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REFERENCES

- Prime Minister B Johnson. PM statement on coronavirus: 18 March 2020. Available: https://www.gov.uk/government/speeches/pm-statement-on-coronavirus-18-march-2020?utm_source=407969fc-4de1-41c8-9571-f6b6ad35efae&utm_medium=email&utm_campaign=govuk-notifications&utm_content=immediate [Accessed 11 Jun 2020].
- HM Government. Children of critical workers and vulnerable children who can access schools or educational settings. Available: <https://www.gov.uk/government/publications/coronavirus-covid-19-maintaining-educational-provision/guidance-for-schools-colleges-and-local-authorities-on-maintaining-educational-provision> [Accessed 16 Mar 2021].
- Prime Minister B Johnson. PM confirms schools, colleges and nurseries on track to begin phased reopening. Available: <https://www.gov.uk/government/news/pm-confirms-schools-colleges-and-nurseries-on-track-to-begin-phased-reopening> [Accessed 11 Jun 2020].
- HM Government. School attendance. Available: <https://www.gov.uk/government/publications/school-attendance> [Accessed 8 Jul 2020].
- Viner RM, Russell SJ, Croker H, *et al.* School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review. *Lancet Child Adolesc Health* 2020;4:397–404.
- Keogh-Brown MR, Jensen HT, Edmunds WJ, *et al.* The impact of Covid-19, associated behaviours and policies on the UK economy: a computable General equilibrium model. *SSM Popul Health*. In Press 2020;12:100651.
- Boast A, Munro A, Goldstein H. An evidence summary of paediatric COVID-19 literature. Available: <https://dontforgetthebubbles.com/evidence-summary-paediatric-covid-19-literature/> [Accessed 8 Jul 2020].
- Zhu Y, Bloxham C KH, *et al.* Children are unlikely to have been the primary source of household SARS-CoV-2 infections 2020.
- World Health Organization. Report of the WHO–China joint mission on coronavirus disease 2019 (COVID-19). Available: [https://www.who.int/publications/i/item/report-of-the-who-china-joint-mission-on-coronavirus-disease-2019-\(covid-19\)](https://www.who.int/publications/i/item/report-of-the-who-china-joint-mission-on-coronavirus-disease-2019-(covid-19)) [Accessed 8 Jul 2020].
- Heavey L, Casey G, Kelly C, *et al.* No evidence of secondary transmission of COVID-19 from children attending school in Ireland, 2020. *Euro Surveill* 2020;25.
- Otte Im Kampe E, Lehfeld A-S, Buda S, *et al.* Surveillance of COVID-19 school outbreaks, Germany, March to August 2020. *Euro Surveill* 2020;25.
- Public Health England. SARS-CoV-2 infection and transmission in educational settings. Available: <https://www.gov.uk/government/publications/sars-cov-2-infection-and-transmission-in-educational-settings> [Accessed 22 Oct 2020].
- Royal College of Paediatrics and Child Health. COVID_19 - talking to children and families about returning to school: guiding principles. Available: <https://www.rcpch.ac.uk/resources/covid-19-talking-children-families-about-returning-school-guiding-principles> [Accessed 9 Jul 2020].
- Brooks SK, Smith LE, Webster RK, *et al.* The impact of unplanned school closure on children's social contact: rapid evidence review. *Euro Surveill* 2020;25.
- Basurto-Dávila R, Garza R, Meltzer MI, *et al.* Household economic impact and attitudes toward school closures in two cities in Argentina during the 2009 influenza A (H1N1) pandemic. *Influenza Other Respir Viruses* 2013;7:1308–15.
- Effler PV, Carcione D, Giele C, *et al.* Household responses to pandemic (H1N1) 2009-related school closures, Perth, Western Australia. *Emerg Infect Dis* 2010;16:205–11.
- van Gemert C, McBryde ES, Bergeri I, *et al.* Description of social contacts among student cases of pandemic influenza during the containment phase, Melbourne, Australia, 2009. *Western Pac Surveill Response J* 2018;9:27–34.
- Lee J. Mental health effects of school closures during COVID-19. *Lancet Child Adolesc Health* 2020;4:421.
- BMG Research. BMG about us. Available: <https://www.bmgresearch.co.uk/bmg/about-us/> [Accessed 16 Mar 2021].
- Smith LE, Woodland L, Amlöt R, *et al.* A cross-sectional survey of parental perceptions of COVID-19 related hygiene measures within schools and adherence to social distancing in journeys to and from school. *BMJ Paediatr Open* 2020;4:e000825.
- HM Government. Schools, pupils and their characteristics: academic year 2019/20. Available: <https://explore-education-statistics.service.gov.uk/find-statistics/school-pupils-and-their-characteristics> [Accessed 25 Jun 2020].
- Chorpita BF, Yim L, Moffitt C, *et al.* Assessment of symptoms of DSM-IV anxiety and depression in children: a revised child anxiety and depression scale. *Behav Res Ther* 2000;38:835–55.
- Chorpita BF. Child FIRST - Focus on innovation and redesign in systems and treatment. Available: <https://www.childfirst.ucla.edu/resources/> [Accessed 6 Jul 2020].
- IBM Corp. IBM SPSS statistics for windows, 26.0 Armonk, NY. 2019.
- HM Government. Attendance in education and early years settings during the coronavirus (COVID-19) outbreak. Available: https://www.gov.uk/government/publications/coronavirus-covid-19-attendance-in-education-and-early-years-settings?utm_source=efcd291f-83ee-4d73-860a-7e823b3c0017&utm_medium=email&utm_campaign=govuk-notifications&utm_content=immediate [Accessed 9 Jun 2020].
- Smith LE, Mottershaw AL, Egan M, *et al.* The impact of believing you have had COVID-19 on self-reported behaviour: cross-sectional survey. *PLoS One* 2020;15:e0240399.
- Idoia M, Berasategi S, Dosil S. Struggling to breathe: a qualitative study of children's wellbeing during lockdown in Spain. *Psychology & Health* 2020;1–16.
- HM Government. Protective measures for out-of-school settings during the coronavirus (COVID-19) outbreak. Available: <https://www.gov.uk/government/publications/protective-measures-for-holiday-or-after-school-clubs-and-other-out-of-school-settings-for-children-during-the-coronavirus-covid-19-outbreak/protective-measures-for-out-of-school-settings-during-the-coronavirus-covid-19-outbreak> [Accessed 8 Jul 2020].
- Panovska-Griffiths J, Kerr CC, Stuart RM, *et al.* Determining the optimal strategy for reopening schools, the impact of test and trace interventions, and the risk of occurrence of a second COVID-19 epidemic wave in the UK: a modelling study. *Lancet Child Adolesc Health* 2020;4:817–27.
- Ebesutani C, Chorpita BF, Higa-McMillan CK, *et al.* A psychometric analysis of the Revised Child Anxiety and Depression Scales–parent version in a school sample. *J Abnorm Child Psychol* 2011;39:173–85.
- Epstein WM. Response bias in opinion polls and American social welfare. *Soc Sci J* 2006;43:99–110.
- Kohler U. Possible uses of Nonprobability sampling for the social sciences. survey methods: insights from the field. Available: <https://surveyinsights.org/?p=10981> [Accessed 29 Jul 2020].

SUPPLEMENTARY MATERIAL

Table 1: Table of frequencies to show reasons children did not attend school.

Reason	Children in School Years (n=432, %)	Children of Key Workers (n=497, %)
I think it is too risky for my child to attend school at the moment	223 (52%)	109 (22%)
The school is not open	140 (32%)	259 (52%)
I have another child who can't go to school	67 (15.5%)	24 (5%)
Being at school will be stressful for my child	59 (14%)	23 (5%)
I think they will get a better education at home than at school at the moment	57 (13%)	25 (5%)
The school has asked my child not to attend	51 (12%)	117 (23.5%)
Someone in my household is clinically vulnerable to coronavirus	45 (10%)	24 (5%)
My child doesn't want to go	44 (10%)	29 (6%)
There's no point, schools will shut again soon anyway	37 (9%)	13 (3%)
My child's friends will not be at school	28 (6.5%)	19 (4%)
Other reason	28 (6.5%)	65 (13%)
I think friends, family or other parents will judge me if I send my child to school	12 (3%)	4 (1%)
I can't arrange transport to get them to school	6 (1%)	10 (2%)
Someone else at the school developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)	6 (1%)	4 (1%)
My child developed symptoms of a different illness	3 (1%)	1 (0%)
They have developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)	2 (0.5%)	2 (0%)
Someone else in the family developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)	0 (0%)	3 (1%)

Table 2: Table of frequencies to show reasons children attended school.

Reason	Children in School Years (n=370, %)	Children of Key Workers (n=72, %)
My child's education will benefit from being at school	208 (56%)	30 (42%)
My child wants to go to school	200 (54%)	35 (49%)
My child will benefit from seeing their friends	187 (50.5%)	27 (37.5%)
I need to work	120 (32%)	40 (56%)
I don't believe my child will be at risk at school	96 (26%)	17 (24%)
Having my child at home is a strain	57 (15%)	10 (14%)
It is compulsory for my child to attend	50 (13.5%)	9 (12.5%)
It reduces costs at home	48 (13%)	7 (10%)
I think friends, family or other parents will judge me if I don't send my child to school	43 (12%)	11 (15%)
I have non-work commitments I need to meet	21 (6%)	4 (6%)
Other reason	9 (2%)	3 (4%)

Table 3: Table of frequencies to show reasons children attended school part-time (less than five days).

Reason	Children in School Years (n=204, %)	Children of Key Workers (n=39, %)
The school only offers for them to be in part-time	80 (39%)	16 (41%)
It is less risky for them to be in part-time	40 (20%)	7 (18%)

I am only sending them in on days where the lessons are important	28 (14%)	8 (20.5%)
Other reason	27 (13%)	3 (8%)
I am using it as childcare and I only need them in part time	24 (12%)	6 (15%)
I am only sending them in on days when I can arrange transport	23 (11%)	4 (10%)
Someone else at the school developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)	14 (7%)	1 (3%)
I started sending them in, but have now changed my mind	13 (6%)	2 (5%)
They have developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)	13 (6%)	1 (3%)
Someone else in the family developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)	12 (6%)	0 (0%)
I am only sending them in on days when their friends are in	11 (5%)	6 (15%)
My child developed symptoms of a different illness	9 (4%)	0 (0%)
They only live with me part time	6 (3%)	1 (3%)

Full Survey Material

D1. Please type your age on your last birthday: [number]

Screenout if D1 = <18

Q1. Which country do you live in? [single code]

- a. England
- b. Scotland
- c. Wales
- d. Northern Ireland
- e. Outside of the UK

Screenout if Q1 = b-e

Q2. Which region do you live in? [single code]

- a. East Midlands
- b. East of England
- c. London
- d. North East
- e. North West
- f. South East
- g. South West
- h. West Midlands
- i. Yorkshire and the Humber

Q3. Are you the parent or guardian of a child who usually attends school (that is, before the coronavirus outbreak occurred) and who lives with you? [single code]

- a. Yes
- b. No

Screenout if Q3 = b

Q4. Which of the following age groups do your children who live with you fall into? Please tick any that apply. [multi code]

- a. 0-3
- b. 4-11
- c. 12-18
- d. None of the above [exclusive]

Screenout if b OR c not selected

Q5. The Government has categorised some people as “critical workers” or “key workers.” For example, this includes people working in health and social care, education, key public services, transport, food distribution and other jobs. As far as you know, are you, or a spouse/partner, a “critical” or “key” worker? Please tick any that apply. [multi code]

- a. Yes, me
- b. Yes, spouse/partner
- c. No [exclusive]
- d. Don't know [exclusive]

IF Q4 = b

Q6. You stated that you have at least one child aged 4-11 who lives with you. Are any of your children who live with you in the following school years? Please tick any that apply. [multi code]

- a. Reception
- b. Year 1
- c. Year 6

- d. I have no children in the school years listed above [exclusive]

IF 2 or more options are selected at Q6

Q7. Thinking only about your children in Reception, Year 1 or Year 6, who live with you, which child had the most recent birthday? If the most recent birthday was shared by more than one child (e.g. twins, or children born on the same day in different years), please answer the following questions thinking about one of these children only. [single code]

- a. My child in Reception
- b. My child in Year 1
- c. My child in Year 6

ONLY SHOW OPTIONS SELECTED AT Q6

IF Q6 = a-c

Q8. Can you please tell us how old that child is? [single code]

- a. 4
- b. 5
- c. 6
- d. 7
- e. 8
- f. 9
- g. 10
- h. 11

IF Q6 = a-c

Q9. Can you please tell us if that child is a: [single code]

- a. Boy
- b. Girl

IF Q6 = a-c

Q10. Can you please tell us the type of school that child usually attends? [single code]

- a. Fee-paying
- b. State-funded school
- c. Don't know

IF Q6 = a-c

Q11A. Thinking about that child, have they attended school at all in the past 7 days? [single code]

- a. Yes, on 5 days
- b. Yes, on 1 to 4 days
- c. No
- d. Don't know

IF Q11A = a/b

Q12A. You said that your child has attended school on at least one day in the past week. For which reasons did you send your child to school? Please tick any that apply [multi code]:

RANDOMISE ORDER OF STATEMENTS, anchor other to bottom

- a) It is compulsory for my child to attend
- b) I need to work
- c) I have non-work commitments I need to meet
- d) My child's education will benefit from being at school
- e) My child will benefit from seeing their friends
- f) Having my child at home is a strain
- g) I don't believe my child will be at risk at school

- h) My child wants to go to school
- i) I think friends, family or other parents will judge me if I don't send my child to school
- j) It reduces costs at home
- k) Other reason [write in]

IF Q11A = b

Q13A. You said that your child has not attended school every day in the past week. For which reasons are they attending only part-time? Please tick any that apply [multi code]:

RANDOMISE ORDER OF STATEMENTS, anchor other to bottom

- a) I am using it as childcare and I only need them in part time
- b) It is less risky for them to be in part-time
- c) The school only offers for them to be in part-time
- d) I am only sending them in on days where the lessons are important
- e) I am only sending them in on days when their friends are in
- f) I am only sending them in on days when I can arrange transport
- g) They only live with me part time
- h) I started sending them in, but have now changed my mind
- i) They have developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)
- j) My child developed symptoms of a different illness
- k) Someone else in the family developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)
- l) Someone else at the school developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)
- m) Other reason [write in]

IF Q11A = c

Q14A. You said that your child has not attended school in the past week. For which reasons did you not send your child to school? Please tick any that apply [multi code]:

RANDOMISE ORDER OF STATEMENTS, anchor other to bottom

- a) Someone in my household is clinically vulnerable to coronavirus
- b) I think it is too risky for my child to attend school at the moment
- c) The school is not open
- d) The school has asked my child not to attend
- e) My child doesn't want to go
- f) I think friends, family or other parents will judge me if I send my child to school
- g) I think they will get a better education at home than at school at the moment
- h) Being at school will be stressful for my child
- i) My child's friends will not be at school
- j) I have another child who can't go to school
- k) I can't arrange transport to get them to school
- l) There's no point, schools will shut again soon anyway
- m) They have developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)
- n) My child developed symptoms of a different illness
- o) Someone else in the family developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)
- p) Someone else at the school developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)
- q) Other reason [write in]

IF Q11A = a/b

Q15A. In this question we are interested in things that happened on the most recent day that your child went to school. Please remember that this survey is anonymous – please be honest in your answers. Please tick any that apply. [multi code]

RANDOMISE ORDER OF STATEMENTS, anchor none of these to bottom

- a) Either on the way to or from school, or at the school gates, I had physical contact with someone that I don't live with
- b) Either on the way to or from school, or at the school gates, I was within 1 metre of someone that I don't live with for 1 minute or longer
- c) Either on the way to or from school, or at the school gates, I was between 1 and 2 metres of someone that I don't live with for 15 minutes or longer
- d) My child used public transport to get to or from school.
- e) My child shared a lift in a car with another family to get to or from school.
- f) I gave a lift in a car to a child from another family to get them to or from school.
- g) My child washed their hands as soon as they got home from school.
- h) My child had a shower or bath as soon as they got home from school.
- i) I washed my child's clothes after they got home from school.
- j) None of these [exclusive]

IF Q11A = a/b

Q16A. Thinking about the facilities or procedures at your child's school. Which of the following, if any, are actually happening as far as you are aware?

Please tick all that apply [multi code]

RANDOMISE ORDER OF STATEMENTS, anchor none of these to bottom

- a) There are hand washing facilities or hand gel dispensers at the entrance to the school that are working
- b) There are hand washing facilities or hand gel dispensers at the entrance to the classrooms that are working
- c) Children's hand washing or hand gel use is being monitored at school
- d) My child's class sizes is now 15 or fewer
- e) Children need to take in their own food and snacks
- f) Children are having their temperature checked on the way in
- g) The school has used markings or barriers to help children keep their distance from each other
- h) None of these are happening at my child's school [exclusive]

Q17. For the next series of questions, we would like you to think about one of your children who usually goes to school (that is, before the coronavirus outbreak occurred). If you have more than one child who usually went to school, then please answer about your child with the most recent birthday. If the most recent birthday was shared by more than one child (e.g. twins, or children born on the same day in different years), please answer the following questions thinking about one of these children only.

Firstly, can you tell us the first name of your child. This is just so we can refer to them throughout the survey. You can give a fake name if you would prefer. [open]

Q18. How old is [CHILD]? [single code]

- a. 4
- b. 5
- c. 6
- d. 7
- e. 8
- f. 9
- g. 10
- h. 11
- i. 12
- j. 13
- k. 14
- l. 15
- m. 16
- n. 17
- o. 18

Q19. What year is [CHILD] in at school [single code]

- a. Reception
- b. Year 1
- c. Year 2
- d. Year 3
- e. Year 4
- f. Year 5
- g. Year 6
- h. Year 7
- i. Year 8
- j. Year 9
- k. Year 10
- l. Year 11
- m. Year 12
- n. Year 13

Q20. Is [CHILD] a: [single code]

- a. Boy
- b. Girl

Q21. What type of school does [CHILD] normally attend? [single code]

- a. Fee-paying
- b. State-funded school
- c. Don't know

If Q5 = a/b AND [Q4 ≠ b or Q6 = d]

Q11B. Has [CHILD] attended school at all in the past 7 days? [single code]

- a. Yes, on 5 days
- b. Yes, on 1 to 4 days
- c. No
- d. Don't know

IF Q11B = a/b

Q12B. You said that [CHILD] has attended school on at least one day in the past week. For which reasons did you send [CHILD] to school? Please tick any that apply [multi code]:

RANDOMISE ORDER OF STATEMENTS, anchor other to bottom

- a) It is compulsory for my child to attend
- b) I need to work
- c) I have non-work commitments I need to meet
- d) My child's education will benefit from being at school
- e) My child will benefit from seeing their friends
- f) Having my child at home is a strain
- g) I don't believe my child will be at risk at school
- h) My child wants to go to school
- i) I think friends, family or other parents will judge me if I don't send my child to school
- j) It reduces costs at home
- k) Other reason [write in]

IF Q11B = b

Q13B. You said that [CHILD] has not attended school every day in the past week. For which reasons is [CHILD] attending only part-time? Please tick any that apply [multi code]:

RANDOMISE ORDER OF STATEMENTS, anchor other to bottom

- a) I am using it as childcare and I only need them in part time
- b) It is less risky for them to be in part-time

- c) The school only offers for them to be in part-time
- d) I am only sending them in on days where the lessons are important
- e) I am only sending them in on days when their friends are in
- f) I am only sending them in on days when I can arrange transport
- g) They only live with me part time
- h) I started sending them in, but have now changed my mind
- i) They have developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)
- j) My child developed symptoms of a different illness
- k) Someone else in the family developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)
- l) Someone else at the school developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)
- m) Other reason [write in]

IF Q11B = c

Q14B. You said that [CHILD] has not attended school in the past week. For which reasons did you not send [CHILD] to school? Please tick any that apply [multi code]:

RANDOMISE ORDER OF STATEMENTS, anchor other to bottom

- a) Someone in my household is clinically vulnerable to coronavirus
- b) I think it is too risky for my child to attend school at the moment
- c) The school is not open
- d) The school has asked my child not to attend
- e) My child doesn't want to go
- f) I think friends, family or other parents will judge me if I send my child to school
- g) I think they will get a better education at home than at school at the moment
- h) Being at school will be stressful for my child
- i) My child's friends will not be at school
- j) I have another child who can't go to school
- k) I can't arrange transport to get them to school
- l) There's no point, schools will shut again soon anyway
- m) They have developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)
- n) My child developed symptoms of a different illness
- o) Someone else in the family developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)
- p) Someone else at the school developed coronavirus symptoms (cough or fever, or change in sense of taste or smell)
- q) Other reason [write in]

IF Q11B = a/b

Q15B. In this question we are interested in things that happened on the most recent day that [CHILD] went to school. Please remember that this survey is anonymous – please be honest in your answers. Please tick any that apply. [multi code]

RANDOMISE ORDER OF STATEMENTS, anchor none of these to bottom

- a) Either on the way to or from school, or at the school gates, I had physical contact with someone that I don't live with
- b) Either on the way to or from school, or at the school gates, I was within 1 metre of someone that I don't live with for 1 minute or longer
- c) Either on the way to or from school, or at the school gates, I was between 1 and 2 metres of someone that I don't live with for 15 minutes or longer
- d) My child used public transport to get to or from school.
- e) My child shared a lift in a car with another family to get to or from school.
- f) I gave a lift in a car to a child from another family to get them to or from school.
- g) My child washed their hands as soon as they got home from school.
- h) My child had a shower or bath as soon as they got home from school.
- i) I washed my child's clothes after they got home from school.
- j) None of these [exclusive]

IF Q11B = a/b

Q16B. Thinking about the facilities or procedures at [CHILD]'s school. Which of the following, if any, are actually happening as far as you are aware? Please tick any that apply. [multi code]

RANDOMISE ORDER OF STATEMENTS, anchor none of these to bottom

- a) There are hand washing facilities or hand gel dispensers at the entrance to the school that are working
- b) There are hand washing facilities or hand gel dispensers at the entrance to the classrooms that are working
- c) Children's hand washing or hand gel use is being monitored at school
- d) My child's class size is now 15 or fewer
- e) Children need to take in their own food and snacks
- f) Children are having their temperature checked on the way in
- g) The school has used markings or barriers to help children keep their distance from each other
- h) None of these are happening at [CHILD]'s school [exclusive]

Q22. Does [CHILD] have special educational needs? [single code]

- Yes
- No
- Don't know / prefer not to say

Q23. In the past 7 days, how many times, if at all, has [CHILD] left your home for each of the following reasons? [multi code]

- a) To go to the shops for groceries, toiletries or medicines
- b) To go to the shops for other items
- c) For exercise
- d) For a medical need (e.g. an outpatient appointment)
- e) To go to school
- f) To provide help to someone else
- g) To meet friends
- h) To meet family members who don't live with you
- i) For another reason

Q24. In the past 7 days, have you done the following, because of the risk from coronavirus:

SCALE

- Yes
- No

STATEMENTS – RANDOMISE

- a. Washed your hands thoroughly and regularly
- b. Stayed 2m (3 steps) away from people you do not live with when outside your home
- c. Washed your clothes when you have returned home
- d. Washed [CHILD]'s clothes when she/ he has returned home
- e. Used tissues or clothing to touch door handles or other objects when outside
- f. Cleaned or disinfected items you have brought into the home, such as groceries or parcels
- g. Left items that you have brought into the home for 24 hours or more before using them, to kill any virus on them
- h. Covered your face or used a face mask when out and about
- i. Covered [CHILD]'s face or given her/him a face mask when out and about
- j. Worn protective gloves when out and about
- k. Made [CHILD] wear protective gloves when out and about

Q25. We are interested in how many people [CHILD] has had close contact with in the past 24 hours. By close contact we mean closer than 2 meters, for fifteen minutes or more. Please remember, this survey is anonymous so please be honest.

In the past 24 hours, how many people in the following categories has [CHILD] had close contact with: [multi code]

- a. Someone [CHILD] lives with
- b. Friends or other children who [CHILD] does not live with
- c. A family member aged under 70 who [CHILD] does not live with
- d. A family member aged over 70 who [CHILD] does not live with
- e. A babysitter, nanny or childminder
- f. Other children, not already reported above
- g. Other adults, not already reported above

Q26. Did [CHILD] attend school in the past 24 hours? [single code]

- a. Yes
- b. No

RANDOMISE ORDER OF Q27a AND Q27b SHOWN TO EACH RESPONDENT

Q27a. How much, if at all, do you agree or disagree with the following statements:

STATEMENTS (randomise order):

- a) If [CHILD] goes out, she/he is likely to catch coronavirus
- b) If [CHILD] goes out, she/he is likely to bring coronavirus back into our home
- c) [CHILD] is keeping up with her/his schoolwork
- d) I feel confident helping [CHILD] with her/his schoolwork
- e) I feel supported by [CHILD's] school
- f) I have access to all the resources that [CHILD] needs to do her/his schoolwork
- g) During lockdown, [CHILD] has learned about important things she/he wouldn't normally learn at school.
- h) In the past 7 days, [CHILD] has been bored

SCALE

- Strongly agree
- Tend to agree
- Neither agree nor disagree
- Tend to disagree
- Strongly disagree
- Not applicable

Q27b. How much, if at all, do you agree or disagree with the following statements:

STATEMENTS (randomise order):

- a) In the past 7 days, my household has had a regular structure to the day
- b) In the past 7 days, [CHILD] has kept in touch with her/his friends
- c) [CHILD] is worried about coronavirus
- d) In the past 7 days, [CHILD] has felt upset about not seeing other family members who do not live with us
- e) In the past 7 days, I have found it hard to keep up with work or other important commitments
- f) In the past 7 days, people in my household have been getting along well
- g) I am worried about the financial impact of lockdown measures
- h) Before the school closures, [CHILD] had extra support at school

SCALE

- Strongly agree
- Tend to agree

- Neither agree nor disagree
- Tend to disagree
- Strongly disagree
- Not applicable

Q28. To what extent, if at all, do you agree or disagree with the following statements?

RANDOMISE ORDER OF STATEMENTS

- a) If it were possible, I would feel comfortable sending [CHILD] to school next week.
- b) If it were possible, I would want to send [CHILD] to school next week.
- c) There is still too much coronavirus around for schools to be able to reopen safely
- d) When [CHILD's] school fully reopens, some parents will send their children to school, even if they have symptoms of coronavirus
- e) It is impossible for children to maintain 'social distancing' at school
- f) Children will not wash their hands properly at school
- g) Staff will not wash their hands properly at school
- h) Schools will not be able to provide good quality education at the moment
- i) School will not be an enjoyable place for [CHILD] to be at the moment

SCALE

- Strongly agree
- Tend to agree
- Neither agree nor disagree
- Tend to disagree
- Strongly disagree
- Not applicable

Q29A. Has [CHILD] had any of the following symptoms in the past 7 days? Please tick any that apply, no matter where you think the symptoms came from, and even if the symptoms were mild. [multi code]

RANDOMISE ORDER OF STATEMENTS, anchor "none of these" and "don't know" to bottom

- New, continuous cough
- High temperature / fever
- Runny nose
- Diarrhoea
- Nausea / feeling sick
- Vomiting
- Sneezing
- Loss of appetite
- Loss of sense of smell (fully or partial)
- Loss of taste
- None of these
- Don't know

Q29B. Have you, or anyone else in your household (excluding [CHILD]) had any of the following symptoms in the past 14 days? Please tick any that apply, no matter where you think the symptoms came from, and even if the symptoms were mild. [multi code]

RANDOMISE ORDER OF STATEMENTS, anchor "none of these" and "don't know" to bottom

- New, continuous cough
- High temperature / fever
- Runny nose
- Diarrhoea
- Nausea / feeling sick
- Vomiting
- Sneezing
- Loss of appetite
- Loss of sense of smell (fully or partial)

- Loss of taste
- None of these
- Don't know

Q30. Do you know if [CHILD] has had, or currently has, coronavirus? (Please select the option that BEST applies) [single code]

- a) They have definitely had it or definitely have it now
- b) They have probably had it or probably have it now
- c) They have probably not had it and probably don't have it now
- d) They have definitely not had it and definitely don't have it now

RANDOMISE ORDER OF Q31a AND Q31b SHOWN TO EACH RESPONDENT

Q31a. Please tell us how often each of these things happen to [CHILD]. There are no right or wrong answers.

SCALE

- *Never*
- *Sometimes*
- *Often*
- *Always*

STATEMENTS

- My child worries about things
- My child worries that something awful will happen to someone in the family
- My child worries that bad things will happen to him/her
- My child feels sad or empty
- Nothing is much fun for my child anymore
- My child has trouble sleeping
- My child has problems with his/her appetite
- My child has no energy for things

Q31b. Please tell us how often each of these things happen to [CHILD]. There are no right or wrong answers.

SCALE

- *Never*
- *Sometimes*
- *Often*
- *Always*

STATEMENTS

- My child worries that something bad will happen to him/her
- My child worries about what is going to happen
- My child thinks about death
- My child is tired a lot
- My child cannot think clearly
- My child feels worthless
- My child feels like he/she doesn't want to move
- My child feels restless

Q32. Thinking about next flu season (September 2020 – March 2021). During this time, you may be invited to vaccinate [CHILD] against flu. All primary school, but not secondary school children, are eligible for the child flu vaccine. For the following questions, please think about the next flu season.

For each of the following statements, please tell us to what extent, if at all, you agree or disagree:

I want [CHILD] to be vaccinated for flu next year (2020/21)

- Strongly agree
- Agree
- Neither agree nor disagree

- Disagree
- Strongly disagree
- Not applicable, [CHILD] will be in secondary school in next school year (2020/21)

IF Q32 = a-e

Q33 I intend [CHILD] to be vaccinated for flu next year (2020/21)

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not applicable, [CHILD] will be in secondary school in next school year (2020/21)

Thinking now about yourself...

Q34. Over the last 2 weeks, how often have you been bothered by the following problems?

SCALE

- Not at all
- Several days
- More than half the days
- Nearly every day

STATEMENTS

- Feeling nervous, anxious or on edge
- Not being able to stop or control worrying
- Little interest or pleasure in doing things
- Feeling down, depressed, or hopeless

And finally, the following questions ask for some more information about you and your household.

D2. Which gender do you identify yourself with? [single code]

- Male
- Female
- Prefer to self-describe
- Prefer not to say

D3. What is your employment status? [single code]

- a. Full time paid job (31+ hours)
- b. Part time paid job (<31 hours)
- c. Doing paid work on a self-employed basis or within your own business
- d. Employed, but currently furloughed
- e. Student / On a government training programme (Nation Traineeship/Modern Apprenticeship)
- f. Out of work (6 months or less)
- g. Out of work (more than 6 months)
- h. Looking after home / Homemaker
- i. Retired
- j. Disabled OR Long-term sick
- k. Unpaid work for a business, community or voluntary organisation
- l. Prefer not to say

If answer a/b/c to D3

D4. Are you currently working from home? [single code]

- Yes
- No

D5. What is the highest level of educational qualification you have received? [single code]

- a. PhD/Doctor
- b. Master's
- c. Bachelor's Degree or equivalent (Such as a NVQ level 5)
- d. Higher education (Such as a HND or a NVQ level 4)
- e. A level or equivalent (Such as Scottish Highers or NVQ level 3)
- f. GCSE and below (Such as O level or an RSA Diploma)
- g. Other qualifications (Such as NVQ level 1)
- h. No qualifications
- i. Prefer not to say

D6. Which of the following income brackets best represents your household income, before tax deductions for income tax, National Insurance etc? [single code]

- a. Less than £5,000
- b. £5,000-£9,999
- c. £10,000-£14,999
- d. £15,000-£19,999
- e. £20,000-£24,999
- f. £25,000-£29,999
- g. £30,000-£34,999
- h. £35,000-£39,999
- i. £40,000-£44,999
- j. £45,000-£49,999
- k. £50,000-£59,999
- l. £60,000-£69,999
- m. £70,000-£84,999
- n. £85,000-£99,999
- o. More than £100,000
- p. Prefer not to say

D7. What is your current marital or civil partnership status? [single code]

- a. Single (i.e. never married and never registered as a same sex civil-partnership)
- b. Co-habiting with partner (but never married or been in a civil partnership)
- c. Civil partnership
- d. Married
- e. Separated, but still legally married / in a civil partnership
- f. Divorced / Civil partnership legally dissolved
- g. Widowed / Surviving partner from a same-sex civil partnership

D8. Which of the following categories would best describe your ethnicity? [single code]

- a. English/Welsh/Scottish/Northern Irish/British
- b. Irish
- c. Gypsy or Irish Traveller
- d. Other
- e. White and Black Caribbean
- f. White and Black African
- g. White and Asian
- h. Other
- i. Indian
- j. Pakistani
- k. Bangladeshi
- l. Chinese
- m. Other
- n. Caribbean
- o. African
- p. Other
- q. Arab
- r. Any other (please specify)
- s. Prefer not to say

D10. How many children in each age group live in your household? [number list]

- 0-3
- 4-10
- 11-15
- 16-18

Allow numerical input for each age group

D11. Do you live with anyone over the age of 70 years? [single code]

- a. Yes
- b. No

D12. Including yourself, how many people live in your household? [single code]

- a. 2
- b. 3
- c. 4
- d. 5
- e. 6
- f. 7
- g. 8
- h. 9
- i. 10 or more

D9. Do any of the following have a medical condition than might make them particularly vulnerable to coronavirus?

SCALE

- Yes
- No
- Don't know

STATEMENTS

- a. Yourself
- b. [CHILD]
- c. Anyone else you live with [show if D12 = b-i]

D13. [Record number] How many bedrooms does your home have?

D14. [Multi code] Which of the following do you have access to at your home:

- a) A garden
- b) A patio / terrace
- c) A balcony
- d) Another form of outdoor space
- e) No outdoor space

Thank you for completing this survey. If you have any concerns about your child's mental health, please click [here](#).